ORDER NO. VRD0206030C2

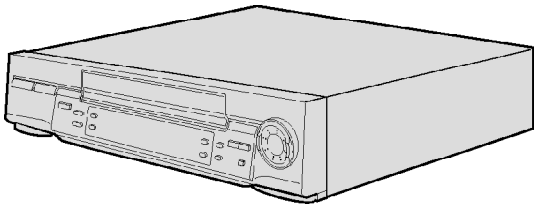
Service Manual

Video Cassette Recorder

Panasonic S-VHS VHS PAL 625 Hi-Fi

NV-HS930EG / NV-HS930B / NV-HS930EC / NV-HS930EE

Z-MECHANISM



SPECIFICATIONS

SPECIFICATIONS

ITEM	SPECIFICATION		ITEM	SPECIFICATION
POWER	SOURCE: 220-240 V AC 50/60 Hz		VIDEO	OUTPUT: EURO AV (AV1/AV2) Connector (21 pin x 2) 1.0 Vp-p, 75 Ω terminated S-VIDEO OUT Connector (S4P) 1.0 Vp-p, 75 Ω terminated VIDEO OUT Connector (Phono type) 1.0 Vp-p, 75 Ω terminated
	CONSUMPTION: 22 watts COMSUMPTION WHEN IN STANDBY MODE: Approx. 3W (NV-HS930EG/EC/EE)			
RECORDING SYSTEM	2 rotary heads, helical scanning system			
	PAL			
TV TUNER SYSTEM	NV-HS930EG/EC	VHF: CHF2-CHF12 CHA-CHH2 [ITALY] (PAL/SECAM B) UHF: CH21-CH69 (PAL/SECAM G) CATV: CHS01-CHS41 (PAL/SECAM B)	AUDIO	HEAD: 1 Stationary head (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)
	NV-HS930B	UHF: CH21-CH68 (PAL I)		INPUT: EURO AV (AV1/AV2) Connector (21 pin x 2) -6dBV (500 mV), More than 10 kΩ AUDIO IN (AV3:FRONT) Connector (Phono type) -6dBV (500 mV), More than 10 kΩ
	NV-HS930EE	VHF: CHE2-CHE12 (PAL/SECAM B) CHR1-CHR12 (SECAM D) UHF: CH21-CH69 (PAL/SECAM G, SECAM K, PAL I) CATV: CHS01-CHS41 (PAL/SECAM B) 44MHz-470MHz (SECAM D)		OUTPUT: AUDIO OUT Connector (Phono type) -6 dBV (500mV), Less than 1kΩ EURO AV (AV1/AV2) Connector (21 pin x 2) -6 dBV (500mV), Less than 1kΩ
RF OUT SYSTEM	NV-HS930EG/EC	UHF: CH21-CH69 (PAL/SECAM G) 71 ± 3 dBμ, 75 Ω close	TAPE FORMAT	S-VHS/VHS Cassette Tape (Tape width 12.7 mm)
	NV-HS930B	UHF: CH21-CH68 (PAL I) 71 ± 3 dBμ, 75 Ω close	TAPE SPEED	SP: 23.39 mm/s LP: 11.695 mm/s EP: 7.798 mm/s Record/Playback Time: SP: 4 hours with 240 min. type tape LP: 8 hours with 240 min. type tape EP: 12 hours with 240 min. type tape FF/REW Time: 60 sec. with 180 min. type tape
	NV-HS930EE	UHF: CH21-CH69 (PAL/SECAM G, SECAM K, PAL I) 71 ± 3 dBμ, 75 Ω close	OPERATING TEMPERATURE	5°C - 40°C
VIDEO	HEADS: 4 rotary heads 1 pair for recording and playback (L-R heads) 1 pair for trick play (L'-R' heads)		OPERATING HUMIDITY	35% - 80%
	INPUT: EURO AV (AV1/AV2) Connector (21 pin x 2) 1.0 Vp-p, 75 Ω terminated S-VIDEO IN (AV3:FRONT) Connector (S4P) 1.0 Vp-p, 75 Ω terminated VIDEO IN (AV3:FRONT) Connector (Phono type) 1.0 Vp-p, 75 Ω terminated		DIMENSIONS	430 (W)×87(H)×289(D) mm
			WEIGHT	3.5 kg
			STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. AC Mains Lead 1 pc. Infra-red Remote Controller

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. INTRODUCTION

This service manual contains technical information which will allow service personnel to understand and service this model.
If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

Note:

1. **Adjustment procedures, Disassembly Procedures and Assembly Procedures for Mechanism Chassis are separate volume from this service manual. / Please refer to the service manual for Z-Mechanism Chassis. (Order No. VRD9802005C2)**
2. **The Model No. is indicated on the Schematic Diagram and Circuit Board Diagrams as follows.**

Model No.	Indication Mark
NV-HS930EG	(EG)
NV-HS930B	(B)
NV-HS930EC	(EC)
NV-HS930EE	(EE)

2. GENERAL DESCRIPTIONS

2.1. SERVICE CAUTION

2.1.1. REPLACING IC6002/EEPROM

When the EEPROM: IC6002 is replaced, applicable model code, option code, tuning channel data and electrical adjustment data will not be available.
Therefore, enter and/or adjust the necessary data after replacing IC6002 by referring following procedure.

STEP1.REPLACE THE IC6002

1. **Take a note that stored TV broadcast channels.**
2. **Remove the C.B.A. with Mechanism unit by referring the Disassembly procedure.**

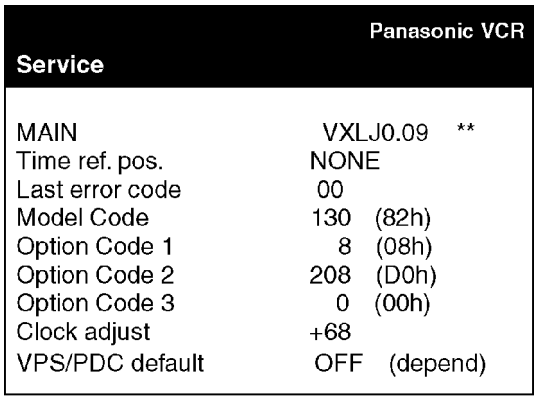
3. Disconnect the AC plug and replace the IC6002.

STEP2.INPUT THE MODEL & OPTION CODE

1. Set up the applicable model code and option code by ordering the following table.

PROCEDURE	F.I.P. DISPLAY
Turn on the Service Mode **1.Press the FF key and the EJECT key simultaneously for more than 3 seconds.**	
Activate the Service Mode 2 **2.While keep pressing FF key, press the EJECT key in twice.**	
Activate the Entering Mode. **3.Press the EJECT key for more than 3 seconds.**	
Set the Mode 2. **4.Press the CH UP key in twice.**	
Display the Setting Code. **5.Press the POWER Button to turn the power on.**	 **(Colon starts flashing)**
Enter the Model and Option Code. **6.Service Screen is displayed on the monitor.** **7.Set the applicable Model and Option code by using REW, PLAY, STOP and FF keys on theRemote Controller. (See Fig.S1 & S2)**	
Exit from Service Mode. **8.Press the POWER Button to turn the power off.** **9. Press FF and EJECT keys simultaneously in 6 times.**	 **(Normal Indication)**

Fig.S1 Service Secreen (sample)



Model No.	Model Code	Option Code 1	Option Code 2	Option Code 3
NV-HS930EG	177 (B1h)	8 (08h)	240 (F0h)	0 (00h)
NV-HS930B	179 (B3h)	40 (28h)	240 (F0h)	0 (00h)
NV-HS930EC	178 (B2h)	8 (08h)	240 (F0h)	0 (00h)
NV-HS930EE	182 (B6h)	8 (08h)	242 (F2h)	0 (00h)

Fig. S2 Model Code & Option Code

NOTE:

1. **Tune the TV Broadcasting channels by referring the memo.**
2. **Since all electrical adjustment data is still not available, perform the Electrical Adjustment continuously.**

WHEN REPLACING THE MAIN C.B.A.

Since the user's Tape Library data is stored in IC6002;EEPROM, swap the EEPROM taking from Original Main C.B.A. and mount it onto the New Main C.B.A. to keep maintain the user's Library Data by ordering the following procedure.

1. **Take the IC6002; EEPROM from the new Main C.B.A. (to be used as replacement.) and keep it aside.**
2. **Take the IC6002; EEPROM from the original Main C.B.A. (to be replaced).**
3. **Mount the EEPROM being taken from original C.B.A. to the new**

Main C.B.A.(to be used as replacement.)

4. Install the new Main C.B.A. to the VCR.

When ordering the above procedure, setting of the model code, option code, tuning channel can be skipped. / However, all electrical adjustment data is unique value in accordance with a deck, perform the Electrical Adjustment continuously.

2.1.2. CYLINDER UNIT REPLACEMENT

1. CYLINDER UNIT REPLACEMENT

A. Remove the mechanism unit from MAIN C.B.A./Chassis by referring "SECTION 2. Disassembly Procedure".

B. Remove the 3 screws (A) of the CYLINDER UNIT with a screw driver.

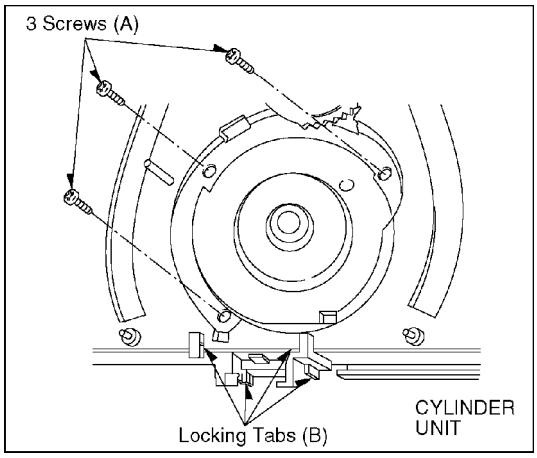
C. Unlock the 4 locking tabs (B) and disconnect the Cylinder fiexible card from the FPC Holder.

D. Remove the CYLINDER UNIT.

CAUTION:

Handle the Cylinder fiexible card with care. When it damaged, you should replace whole Cylinder unit.

Fig. S3



2. UPPER CYLINDER DISASSEMBLY

A. Remove 2 screws (A).

B. Remove the Cylinder Stator Unit.

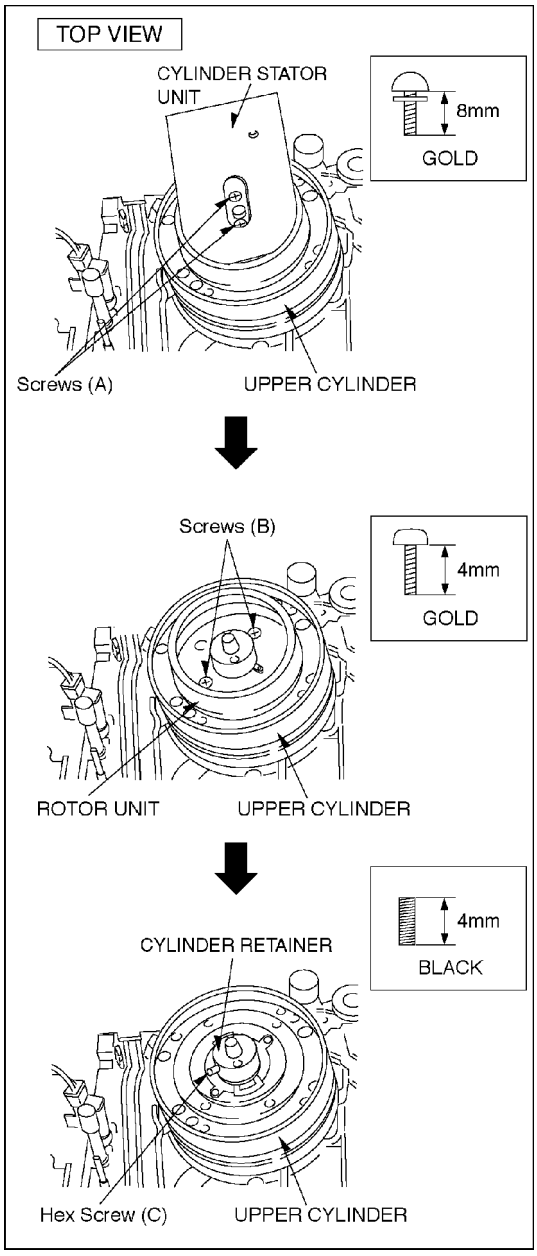
C. Remove 2 screws (B).

D. Remove the Cylinder Rotor Unit.

E. Loose Hex screw (C) (1.5 mm) and remove the CYLINDER RETAINER.

F. Remove the Upper Cylinder.

Fig. S4



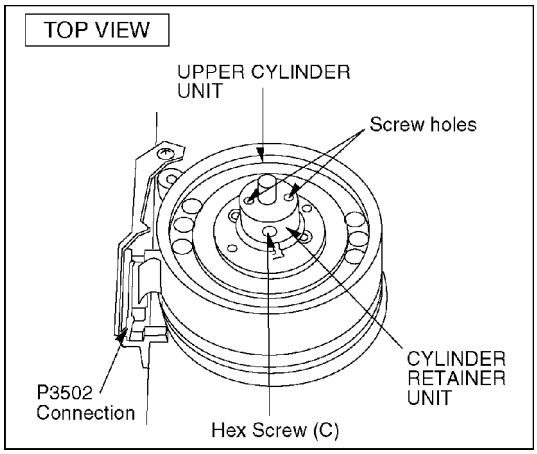
3. UPPER CYLINDER ASSEMBLY

When reassembling, perform the steps in the reverse order.

Notes:

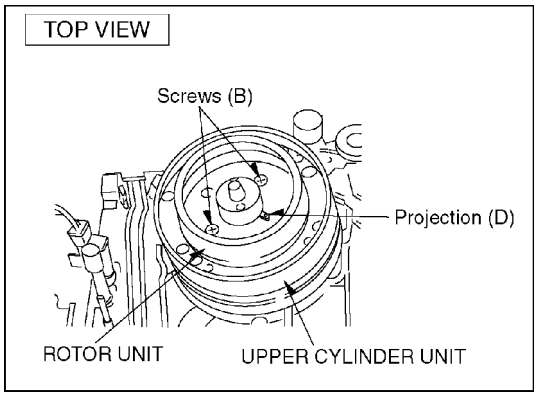
1. **Install the Cylinder Retainer so that the 2 holes on top of the Cylinder Retainer are at right angles with the P3502 Connection.**
2. **Tighten the Hex screw (C) (1.5 mm) while pressing down on top of the Cylinder Retainer.**

Fig. S5



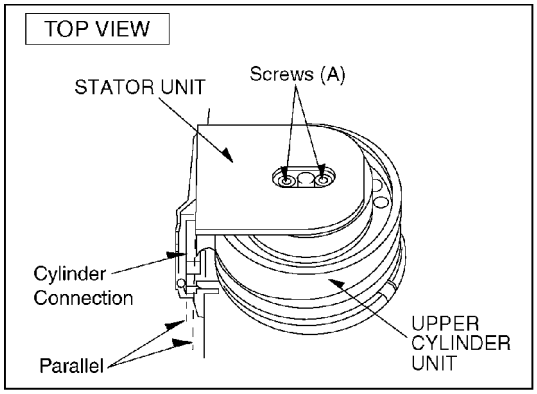
3. **Install the Cylinder Rotor Unit so that the inner hole of the Cylinder Rotor Unit fits to the small projection (D) on top of the Upper Cylinder.**
4. **Tighten 2 screws (B).**

Fig. S6



5. **install the Cylinder Stator Unit.**
6. **Tighten 2 screws (A).**

Fig. S7



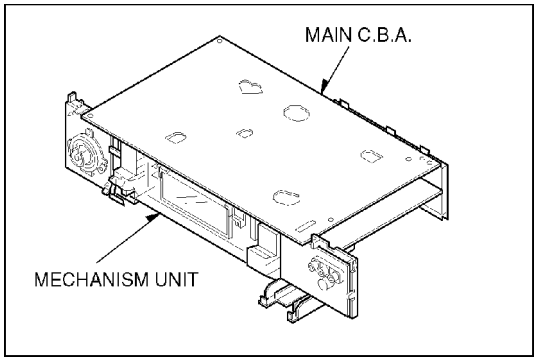
7. **Confirm the PG SHIFTER ADJUSTMENT with the alignment tape**

(PAL: VFJ8125H3F) and adjust it if necessary.

2.1.3. CHECKING OF MAIN C.B.A.

When servicing the MAIN C.B.A., take out the MAIN C.B.A. and mechanism from the frame and turn over.

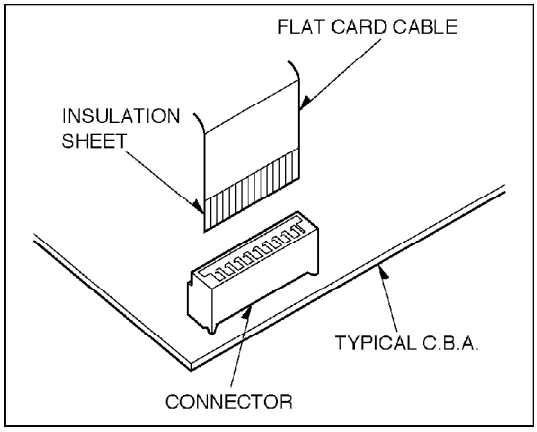
Fig. S8



2.1.4. FLAT CARD CABLE INSTALLATION

When installing the Flat Card Cable on the connector, install the Flat Card Cable with the cable contacts facing the connector contacts.

Fig. S9



2.2. REMOVAL OF CASSETTE TAPE

There are 2 ways to remove a cassette tape.

1. Service Information Display Operation

A. Press the FF and EJECT keys simultaneosly for 3 seconds and set the Service Mode 7.

B. Press STOP key in order to rotate the Loading Motor for unloading operation. (Pay an attention of tape slack)

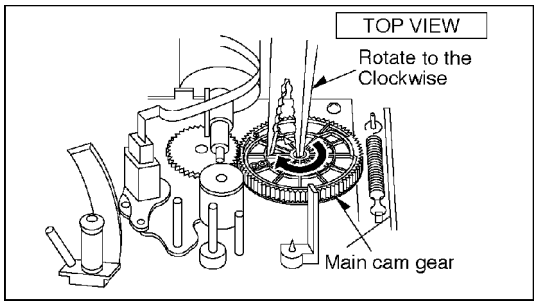
2. Manual Operation

A. Disconnect the AC Mains Lead and remove the Top Panel.

B. Rotate the Main Cam Gear clockwise until the Loading Posts

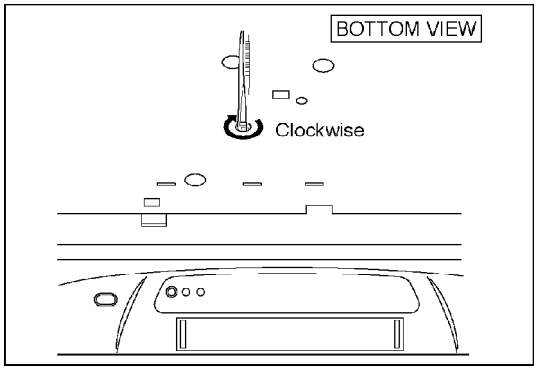
move to fully unloaded position as shown in Fig. S10. (Tape is remaining)

Fig. S10



C. Rotate the Capstan Motor clockwise from the bottom side to take up the tape.

Fig. S11



D. Rotate the Main Cam Gear clockwise until the cassette tape is ejected.

2.3. INTRODUCTION OF VIDEO HEAD CLEANING CASSETTE / (POLISHING TYPE)

1. **We are pleased to introduce Panasonic Video Head Cleaning Cassette, VFK0923FT [for service purposes] and VFK0923FSE [for end users] for all VHS/SVHS VCP and VCR.**
2. **These cleaning cassettes are exclusive removing the hard and sticky clogging on video heads.**
3. **These improve the efficiency of video head cleaning service and shortening cleaning time for end users.**

VFK0923FT (For Service usage)	
Type of Cassette	**Full VHS Cassette**
Cleaning Time	**10 Seconds/Time**
Tape Length	**20 m**
Usability in a Path	**180 Times**

VFK0823FSE (For end users)	
Type of Cassette	**Full VHS Cassette**
Cleaning Time	**10 Seconds/Time**
Tape Length	**3.34 m**
Usability in a Path	**30 Times**

VFK0823FSE (For end users)

Note:

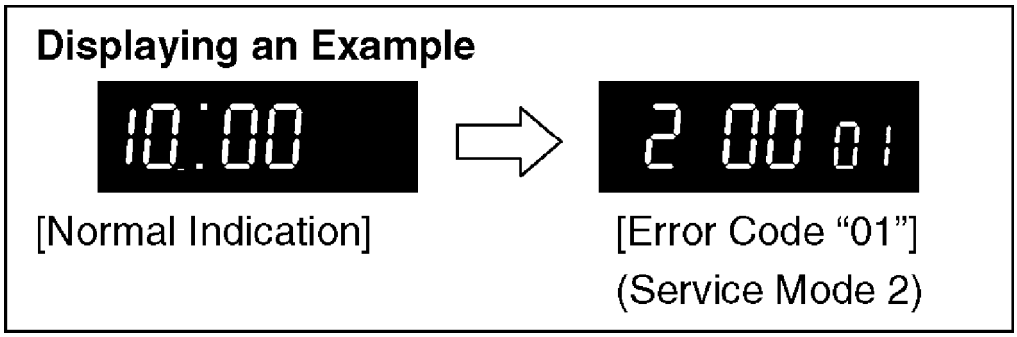
The tape material itself is the same in both types.

2.4. SELF-DIAGNOSIS RESULT DISPLAY

The "SELF-DIAGNOSIS RESULT DISPLAY & MEMORY function is built in this VTR.
It means that when the VCR detects undesirable condition, it can be displayed a “Error code (Two numbers from the left)” with Service Mode 2.
Since the "Error code" is stored in the EEPROM, it can be displayed although after disconnected the AC leads. It can be displayed with Service Mode 2.
(If a second error had been detected, only the most recent error can be displayed.)
For more details, refer to the Service Manual for Z-Mechanism Chassis Order number VRD9802005C2.

NOTE:

To erase the memorized “ERROR” code, press the FF and EJECT keys simultaneously for more than 5 seconds.



INDICATION	CAUSE	REMEDY/CHECK
01	After cylinder lock is detected, the cylinder does not start rotating again even after tape unloading.	Check the cylinder motor drive circui
02	Cassette tape is not wound up during the tape unloading except EJECT mode.	Check the capstan motor drive circui
03	Mechanism locks during mode transition except EJECT mode.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment. 3. Check the mode switch.
04	Mechanism locks during tape unloading.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment.
06	Mechanism locks after tape unloading in EJECT mode.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment for cass
07	During recording mode, recording signal is less than the normal condition.	Protection of the over-current flowin transistor which produces the power for recording mode.
08	Recording circuit works except recording mode.	Check the recording circuit.
16	Cylinder lock detection.	Check the cylinder unit and the cylin drive circuit.
17	Supply reel mechanism lock detection	Check the supply reel mechanism an supply reel circuit.
18	Take-up reel mechanism lock detection	Check the Take-up reel mechanism a Take-up reel circuit.
2*	PG shifter automatic adjustment error.	Check the servo/system control circu cylinder unit.

Fig. T1 Self-Test indication Display

2.5. CAUTION FOR AC MAINS LEAD (NV-HS930B)

3. ADJUSTMENT PROCEDURES

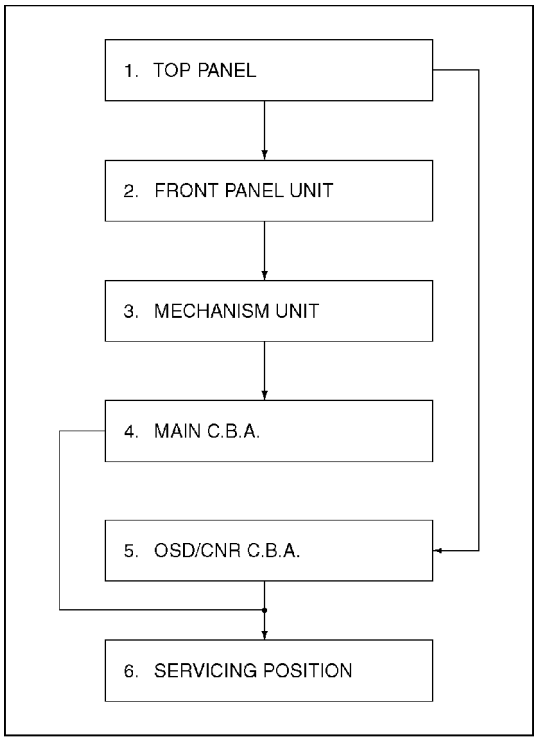
3.1. DISASSEMBLY METHOD

3.1.1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing.

When reassembling, perform the steps in the reverse order.

Fig. D1

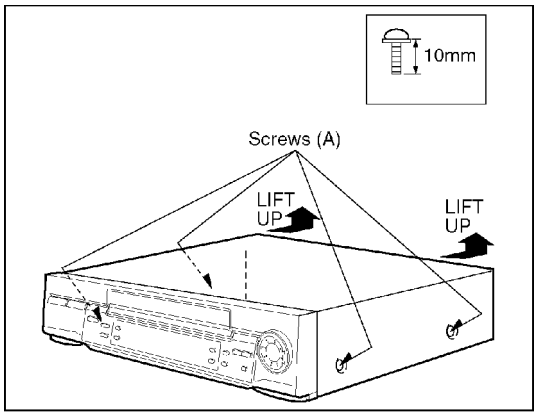


3.1.2. DETAIL OF DISASSEMBLY METHOD

1. REMOVAL OF THE TOP PANEL

Remove	**4 Screws (A)**

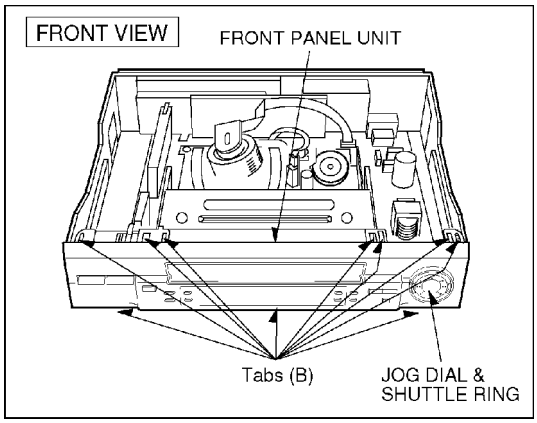
Fig.D2



2. REMOVAL OF THE FRONT PANEL UNIT

Remove	**JOG DIAL & SHUTTLE RING**
Unlock	**10 Tabs (B)**

Fig. D3



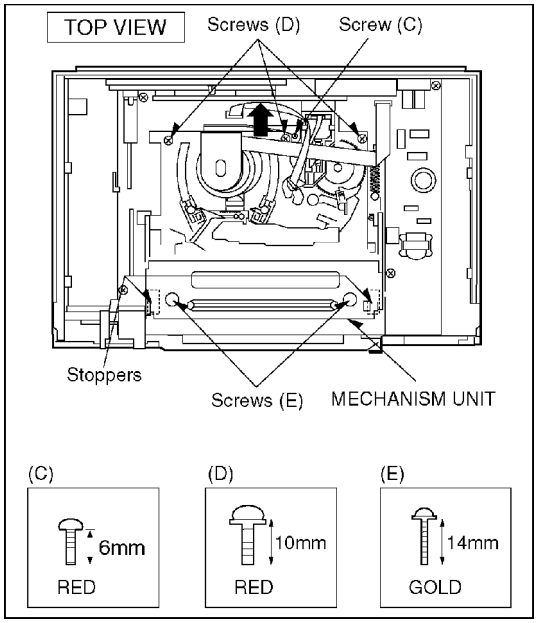
3. REMOVAL OF THE MECHANISM UNIT

Remove	**Screw (C)**
Remove	**3 Screws (D)**
Remove	**2 Screws (E)**

Note:

1. **Keep pressing 2 stoppers on Cassette Holder Plate and Press Cassette Holder Plate to the rear.**
2. **Remove the Mechanism Unit after bend the Cylinder Shield in the direction of the arrow.**

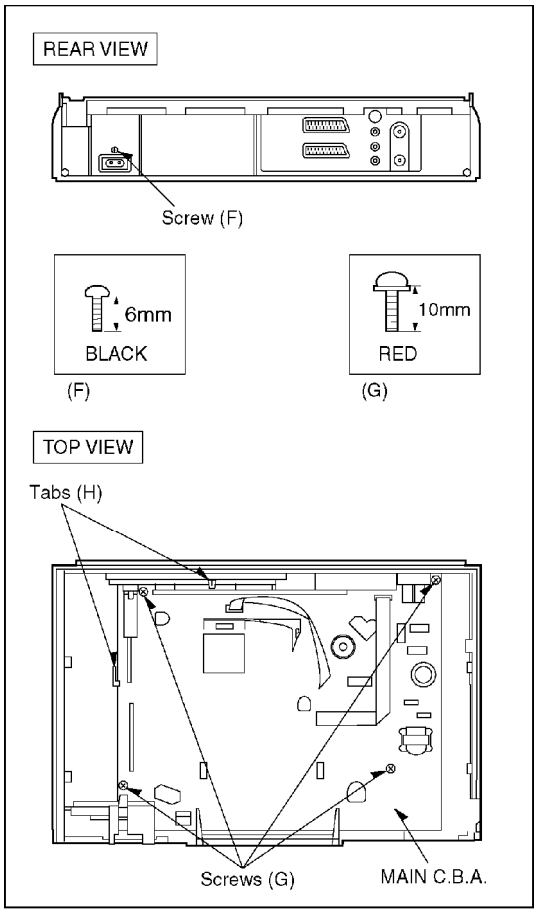
Fig. D4



4. REMOVAL OF THE MAIN C.B.A.

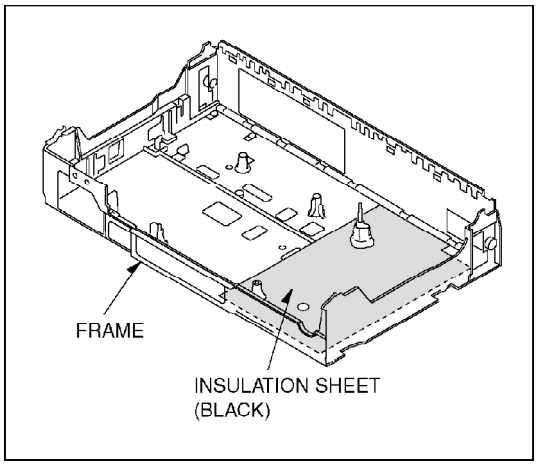
Remove	**Screw (F)**
Remove	**4 Screws (G)**
Unlock	**2 Tabs (H)**

Fig. D5



NOTE:
Before mounting the MAIN C.B.A. onto the frame, be sure to confirm that the insulation sheet is mounted on the frame as shown in Fig. D6.

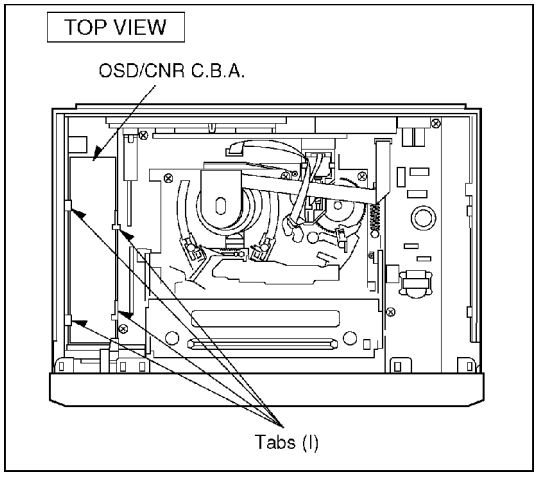
Fig. D6



5. REMOVAL OF THE OSD/ CNR C.B.A.

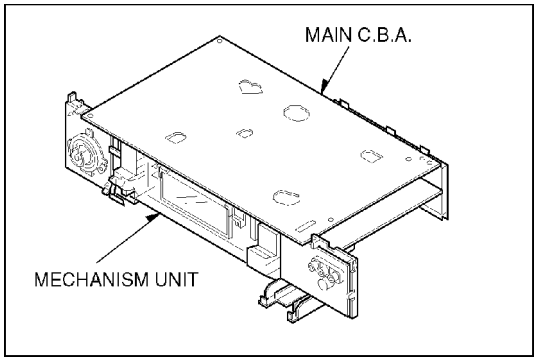
Unlock	**4 Tabs (I)**

Fig. D7



6. SERVICING POSITION

Fig. D8



3.2. MECHANICAL ADJUSTMENT PROCEDURES

Refer to the Service Manual for Z-Mechanism Chassis. / (Order No. VRD9802005C2)

3.3. ELECTRICAL ADJUSTMENT PROCEDURES

3.3.1. TEST EQUIPMENT

The following equipments are required for Electrical Adjustments.

1. Dual-Trace Oscilloscope
   - Voltage Range: 0.005-5V/div
   - Frequency Range: DC-35MHz
   - Probes: 10:1 / 1:1
2. Frequency Counter
   - Frequency Range: 0-10MHz
   - Probes: 1:1
3. Universal Counter
4. Digital Volt Meter (D.V.M.)
5. Video Sweep Generator
6. Sinewave Generator
7. Video Pattern Generator
8. Monitor TV
9. DC Power Supply
10. VHS/S-VHS Blank Tape
11. VHS Alignment Tape
    - Parts No.: VFJ8125H3F(PAL)

3.3.2. VCR SETTING

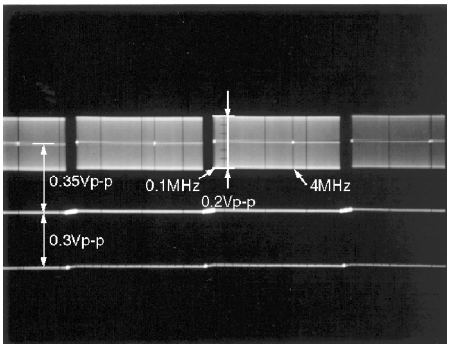
When no indication in the procedure, set each selector as follows.

1. TAPE SPEED: SP
2. CHANNEL: AV1/AV2/AV3
   (Set to signal input terminal number)
3. S-VHS SW: ON

3.3.3. ADJUSTMENTS

ITEM	TP	ADJ.	MODE	INPUT	TAPE	M. EQ.	SPEC	REMARKS
PG SHIFTER ADJUSTMENT	---	---	PLAYBACK	---	ALIGNMENT TAPE (PAL)	---	---	Refer to procedure as shown in Fig. E5.
S-VHS FREQUENCY RESPONSE ADJUSTMENT	VIDEO OUT (TP3021)	---	SP/LP PLAYBACK (SELF-REC)	VIDEO SWEEP (See Fig. E1)	S-VHS BLANK TAPE	OSCILLO SCOPE/ VIDEO SWEEP GENERATOR	SP:-4.5+-1(dB) (50~70%) LP:-6.0+-1(dB) (40~60%) (See Fig.E2)	Refer to the procedure as shown in Fig. E6.
VHS FREQUENCY RESPONSE ADJUSTMENT	VIDEO OUT (TP3002)	---	SP/LP PLAYBACK (SELF-REC)	VIDEO SWEEP (See Fig. E3)	VHS BLANK TAPE	OSCILLO SCOPE/ VIDEO SWEEP GENERATOR	SP: 0+-1 (dB) (90~110%) LP: 0+-1 (dB) (90~110%) (See Fig. E4)	Refer to the procedure as shown in Fig. E7.
FM AUDIO LEVEL METER ADJUSTMENT	MONITOR TV	---	STOP	-6dBV (0.5Vrms) SINE WAVE 1kHz	---	---	---	Refer to the procedure as shown in Fig. E8.

Fig.E1



CONDITION: BURST SIGNAL OFF / 75ohm TERMINATED

Fig.E2

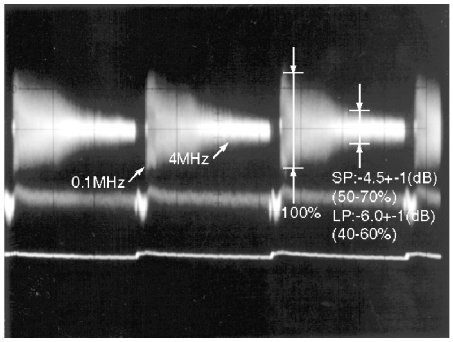
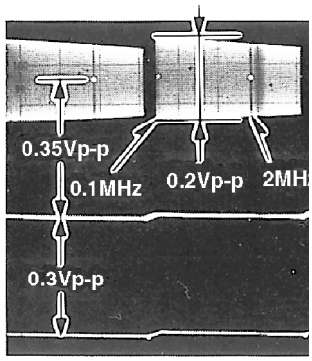
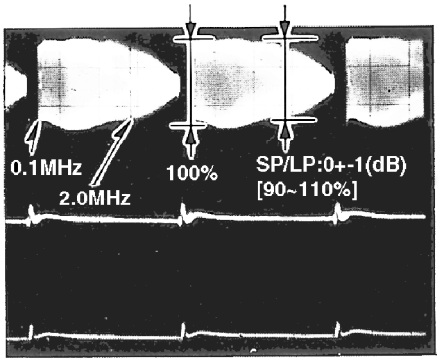


Fig.E3



CONDITION: BURST SIGI 75ohm TERMIN

Fig.E4



3.3.4. PG SHIFTER ADJUSTMENT / (AUTOMATIC)

PROCEDURES	FIP DISPLAY
Press the FF and EJECT Keys simultaneously for 3 seconds.	
Press the FF and EJECT Keys simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP key once.	
Insert the Alignment cassette tape. (PAL:VFJ8125H3F)	
When the sequence of the automatical adjustment has been terminated, the following action has been made. *SUCCEED: The cassette tape is ejected. *ERROR : The "F2"is displayed on the FIP. (Check the Servo/Syscon circuit and Cylinder unit.)	
Release the Service mode by pressing the EJECT and FF keys simultaneously in 6 times until the FIP becomes normal indication.	

Fig. E5

3.3.5. S-VHS VIDEO FREQUENCY RESPONSE ADJUSTMENT

PROCEDURES	FIP DISPLAY
Set the S-VHS SW to ON. / Insert the S-VHS BLANK TAPE. / Input the Video sweep signal (See Fig. E1) to AV3 (S-VIDEO IN) and record it in SP and LP.	
Press the FF and EJECT Keys simultaneously for 3 seconds.	
Press the FF and EJECT Keys simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP and/or CH DOWN key until "11" is displayed on FIP.	
Insert the Self-recorded tape and playback it. (SP/LP mode)	
Connect the Oscilloscope to: *CH1....Video Out (TP3021). *CH2....V.FREQ.(TW6002)	
Press the "4" key on the remote controller. (Confirm that TW6002 becomes high(2.5V)).	
Adjust the Frequency response by pressing the "2"(increase) and/or "8"(decrease) key on the Remote Controller. (See Fig.E2)	
Store the Adjusted value by pressing the "5" key on the Remote Controller.	
Release the Service mode by pressing the EJECT and FF keys simultaneously in 6 times until the FIP becomes normal indication.	

Fig. E6

3.3.6. VHS VIDEO FREQUENCY RESPONSE ADJUSTMENT

PROCEDURES	FIP DISPLAY
Set the S-VHS SW to OFF. / Insert the VHS Blank Tape. / Input the Video sweep signal (See Fig. E3) to AV1 (VIDEO IN) and record it in SP and LP.	
Press the FF and EJECT Keys simultaneously for 3 seconds.	
Press the FF and EJECT Keys simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP and/or CH DOWN key until "11" is displayed on FIP.	
Insert the Self-recorded tape and playback it. (SP/LP mode)	
Connect the Oscilloscope to: *CH1....Video Out (TP3002). *CH2....V.FREQ.(TW6002)	
Press the "4" key on the remote controller. (Confirm that TW6002 becomes high(2.5V)).	
Adjust the Frequency response by pressing the "2"(increase) and/or "8"(decrease) key on the Remote Controller. (See Fig.E4)	
Store the Adjusted value by pressing the "5" key on the Remote Controller.	
Release the Service mode by pressing the EJECT and FF keys simultaneously in 6 times until the FIP becomes normal indication.	

Fig. E7

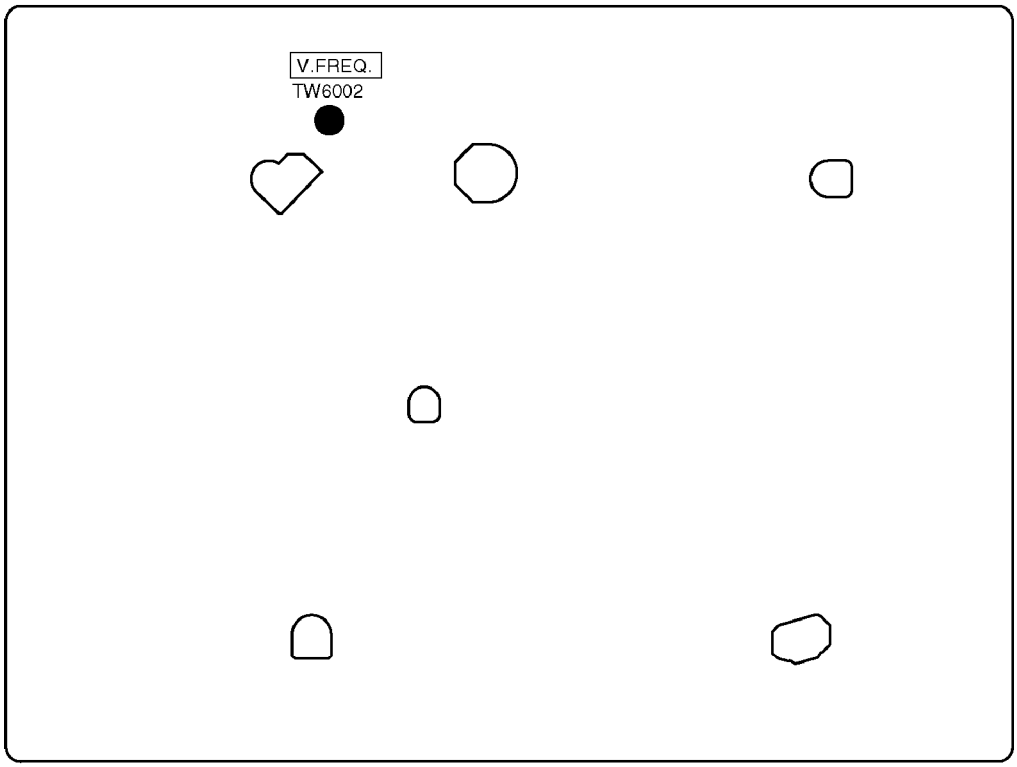
3.3.7. FM AUDIO LEVEL METER ADJUSTMENT

PROCEDURES	FIP DISPLAY
Supply 1kHz/-6dBV (0.5Vrms) sine wave to AV1,AV2 or AV3[AUDIO IN(R&L)] . **Select the audio input.** **Connect the monitor scope to VIDEO OUT terminal.**	
Press the FF and EJECT Keys simultaneously for 3 seconds.	
Press the FF and EJECT Keys simultaneously twice.	
Press the EJECT Key for 3 seconds.	
Press the CH UP and/or CH DOWN Key until "4" is displayed on FIP.	
Press the PLAY Key of the Remoete Controller to send the PLAY KEY SIGNAL . Then the FM AUDIO LEVEL METER ADJUSTMENT will be started automatically.	
When the sequence of the automatical adjustment has been terminated, the following action has been made. ***SUCCEED: The OSD u-com memorize this voltage to EEPROM as / standardvoltage, and "REC VR screen" is displayed on / the monitor TV.** ***FAILURE: "Pleaseinsert video tape!" screen is displayed on the / monitor TV.**	
Release the Service mode by pressing the EJECT and FF keys simultaneously in 6 times until the FIP becomes normal indication.	

Fig. E8

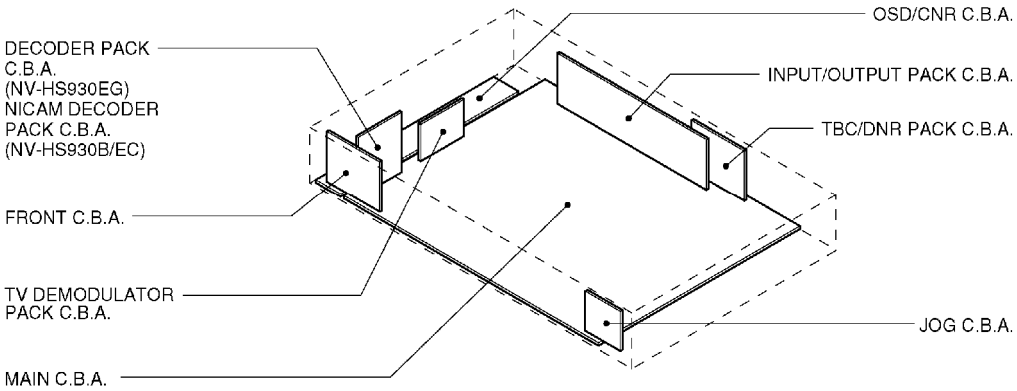
3.3.8. LOCATION OF TEST POINTS& CONTROLS

MAIN C.B.A.



INPUT/OUTPUT PACK C.B.A.

3.3.9. CIRCUIT BOARD LAYOUT



4. ABBREVIATIONS

5. INPUT/OUTPUT CHART

5.1. INPUT/OUTPUT CHART FOR IC6001

Fig. MP1

Fig. MP2

Fig. MP3

5.2. TRUTH TABLE (NV-HS930EG/EC/EE)

5.3. TRUTH TABLE (NV-HS930B)

6. WAVEFORM TABLE& VOLTAGE CHART

6.1. WAVEFORM TABLE

6.2. VOLTAGE CHART

7. BLOCK DIAGRAMS

7.1. SYSTEM CONTROL& SERVO BLOCK DIAGRAM

7.2. LUMINANCE& CHROMINANCE BLOCK DIAGRAM

7.3. AUDIO BLOCK DIAGRAM

8. SCHEMATIC DIAGRAMS

8.1. POWER TRANSFORMER SECTION IN MAIN SCHEMATIC DIAGRAM

8.2. POWER SUPPLY/ RF SECTION IN MAIN SCHEMATIC DIAGRAM

8.3. TIMER SECTION IN MAIN SCHEMATIC DIAGRAM

8.4. SYSTEM CONTROL& SERVO SECTION IN MAIN SCHEMATIC DIAGRAM

8.5. LUMINANCE& CHROMINANCE/ AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

8.6. Hi-Fi AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

8.7. OSD/CNR SCHEMATIC DIAGRAM

8.8. TBC/CNR PACK SCHEMATIC DIAGRAM

8.9. FRONT SCHEMATIC DIAGRAM

8.10. JOG SCHEMATIC DIAGRAM

8.11. INPUT/ OUTPUT PACK SCHEMATIC DIAGRAM

8.12. TV DEMODULATOR PACK SCHEMATIC DIAGRAM

8.13. DECODER PACK SCHEMATIC DIAGRAM (NV-HS930EG)

8.14. NICAM DECODER PACK SCHEMATIC DIAGRAM (NV-HS930B/ EC/EE)

8.15. CYLINDER STATOR UNIT SCHEMATIC DIAGRAM

8.16. CAPSTAN UNIT SCHEMATIC DIAGRAM

9. CIRCUIT BOARD ASSEMBLIES

9.1. INPUT/OUTPUT PACK C.B.A.

9.2. MAIN C.B.A.

9.3. CYLINDER STATOR UNIT

9.4. FRONT C.B.A.

9.5. OSD/CNR C.B.A.

9.6. TBC/DNR PACK C.B.A.

9.7. JOG C.B.A.

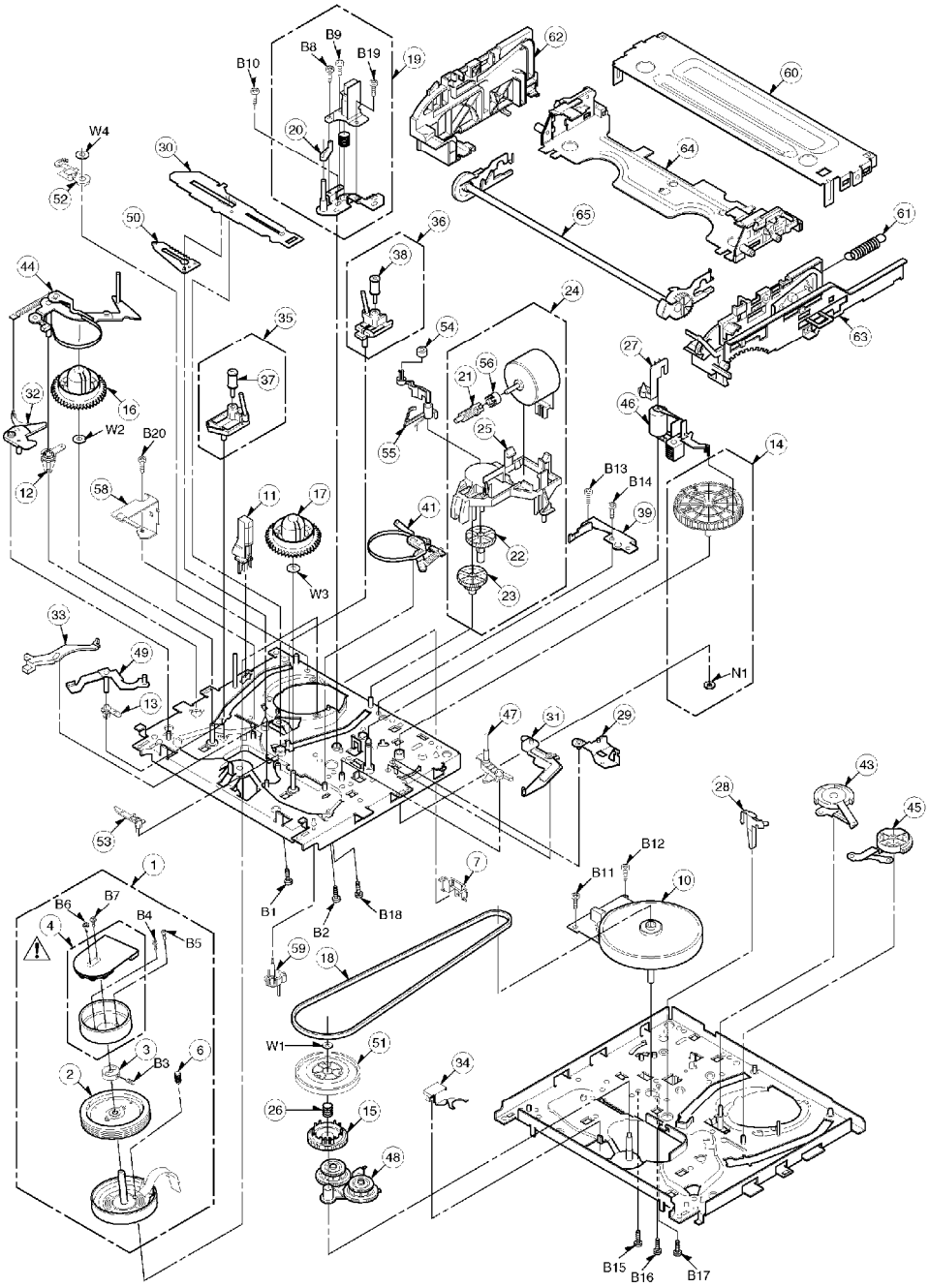
9.8. TV DEMODULATOR PACK C.B.A.

9.9. DECODER PACK C.B.A. (NV-HS930EG)

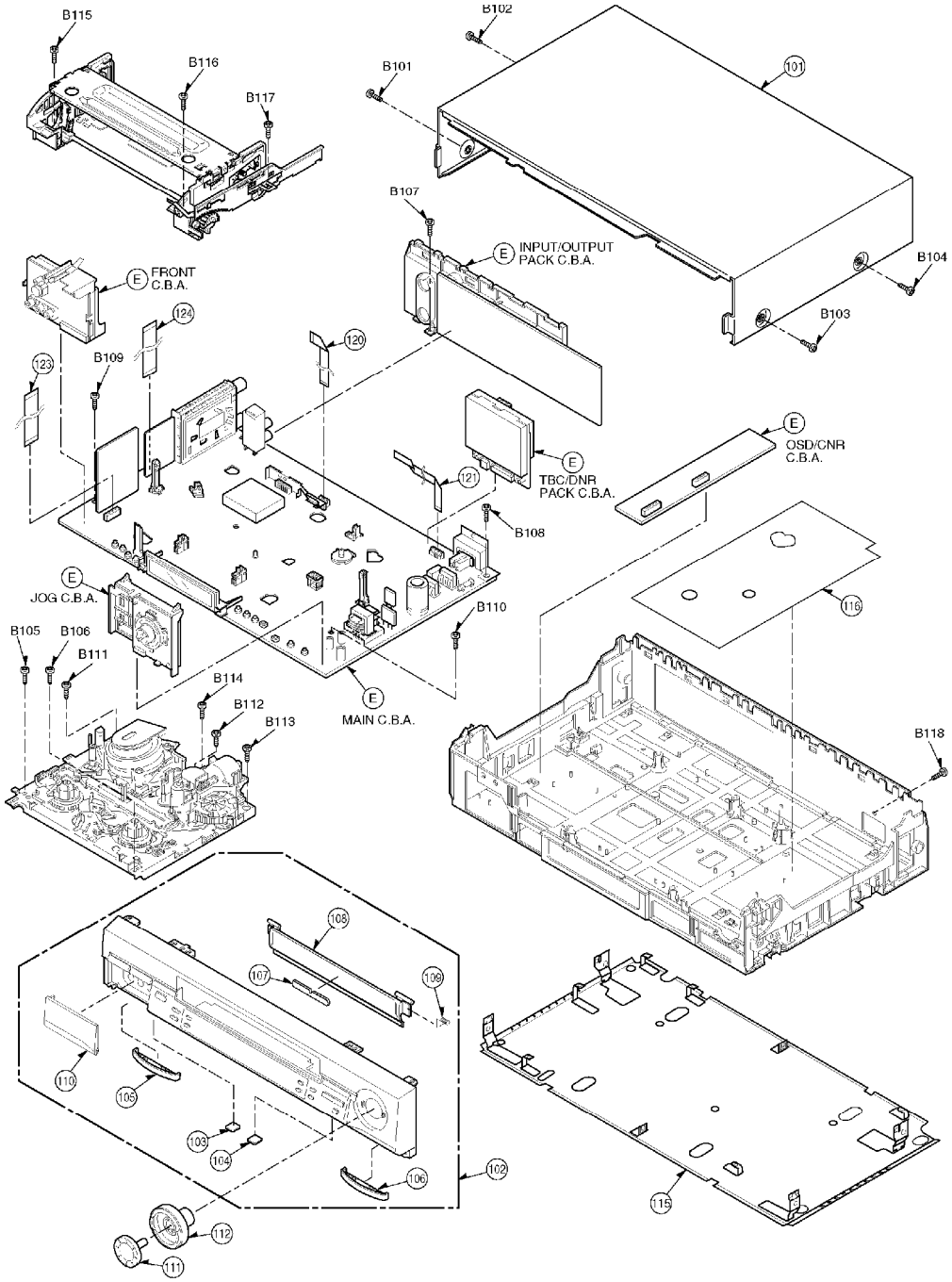
9.10. NICAM DECODER PACK C.B.A. (NV-HS930B/EC/EE)

10. EXPLODED VIEWS

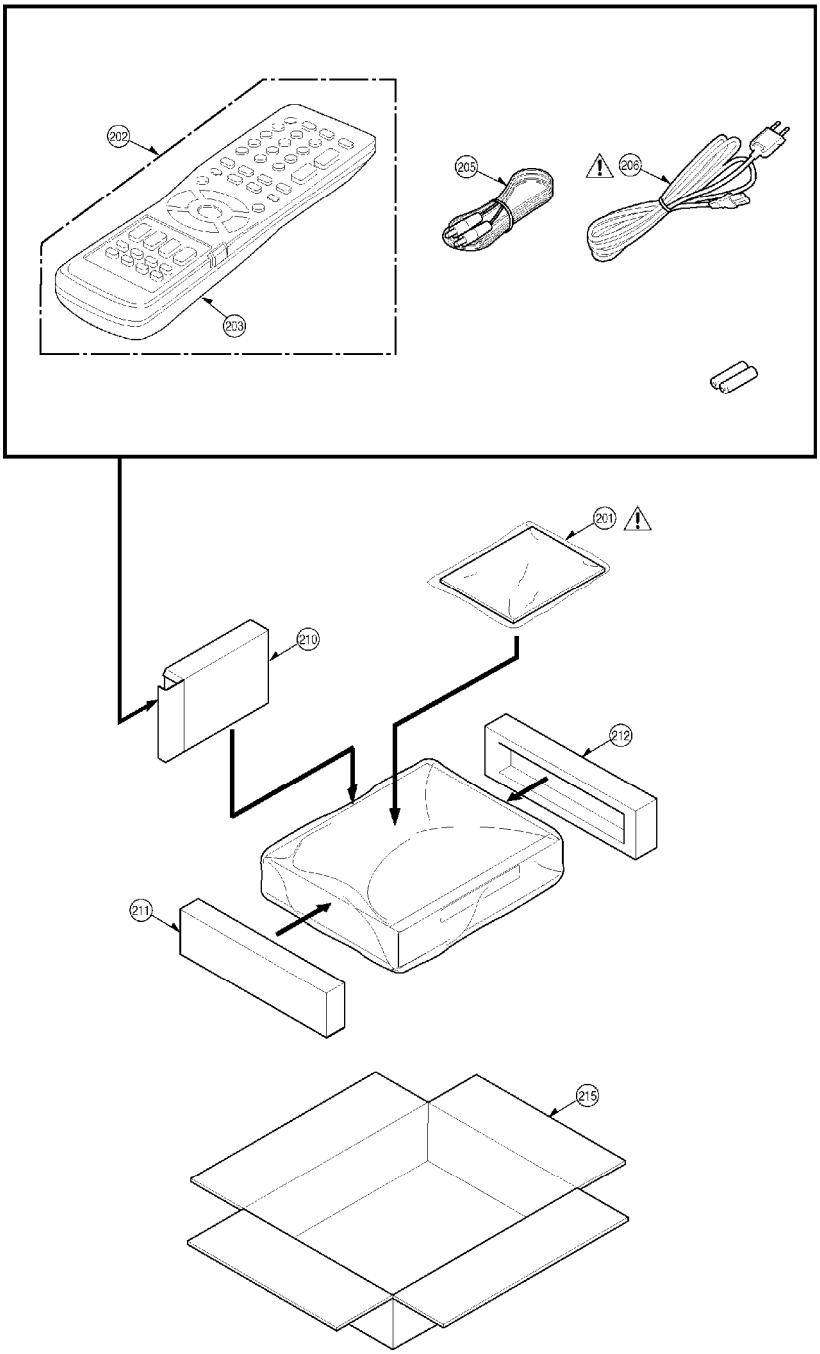
10.1. CHASSIS PARTS SECTION



10.2. CASING PARTS SECTION



10.3. PACKING PARTS SECTION



11. REPLACEMENT PARTS LIST

11.1. CHASSIS PARTS SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. " [MAVD] " in the Remarks column shows that the parts is/are supplied from MAVD.

Ref. No.	Part No.	Part Name & Description	Remarks
1	VEG1600	CYLINDER UNIT	[MAVD]
2	VXP2173	UPPER CYLINDER UNIT	[MAVD]
3	VDB1256	CYLINDER RETAINER	
4	VEM0715	CYLINDER MOTOR UNIT	⚠
6	VXS0135	EARTH BRUSH	
7	VMD3795	FLAT CABLE HOLDER	
10	VEK9069	CAPSTAN UNIT	
11	L1AZ00000004	FE HEAD	
12	VDB1431	TENSION ARM BOSS	
13	VDB1460	SUPPLY BRAKE ARM BOSS	
14	VDG1220KIT	MAIN CAM GEAR	
15	VDG1221	CONVERSION GEAR	
16	VDR0350	REEL TABLE	
17	VDR0350	REEL TABLE	
18	VDV0382	CAPSTAN BELT	
19	VED0412	A/C HEAD UNIT	
20	VMX2656	P4 CAP	
21	VDG1217	WORM GEAR	
22	VDG1218	WORM WHEEL GEAR	
23	VDG1219	CENTRE GEAR	
24	VEM0604	LOADING MOTOR UNIT	
25	VMD2619	MOTOR BRACKET	
26	VMB3045	CONVERSION GEAR SPRING	
27	VMD2620	OPENER PIECE	
28	VMD2738	LED PRISM	
29	VML3165	DRIVE RACK ARM	
30	VML3166	MAIN LEVER	
31	VML3167	DRIVE MAIN LEVER ARM	
32	VML3172	SUPPLY SPRING ARM	
33	VML3176	CONVERSION LEVER A	
34	VML3177	CONVERSION LEVER B	
35	VXA6226	INCLINED BASE (S) UNIT	
36	VXA5854	INCLINED BASE (T) UNIT	
37	VXP1895	ROLLER POST	
38	VXP1891	ROLLER POST	
39	VMA9672	SUPPORT ANGLE	
41	VXL2667	TAKE UP BRAKE ARM UNIT	
43	VXL2670	TAKE UP LOADING ARM UNIT	
44	VXL2793	TENSION ARM UNIT	
45	VXL2672	SUPPLY LOADING ARM UNIT	
46	VXL2785	PINCH ARM UNIT	
47	VXL2996	P5 ARM UNIT	
48	VXL2792	IDLER ARM UNIT	
49	VXL2733	SUPPLY BRAKE ARM UNIT	
50	VXL2747	LOADING RACK UNIT	
51	VXP2053	CENTRE CLUTCH UNIT	
52	VXL2783	REV ARM UNIT	
53	VML3276	IDLER POSITIONING ARM	
54	VDP1668-K	CLEANER ROLLER	
55	VML3164	CLEANER ARM	
56	VDP1660	MOTOR COUPLING	[MAVD]
58	VXS0244	EARTH PLATE	
59	VMD2858	S-VHS SW ACTUATER	

Ref. No.	Part No.	Part Name & Description	Remarks
60	VMA9516	TOP PLATE	
61	VMB3047	CONNECTION SPRING	
62	VMD3379	SIDE PLATE (L)	
63	VXA6540	SIDE PLATE (R) UNIT	
64	VXA5746	CASSETTE HOLDER UNIT	
65	VXP1730	MAIN SHAFT UNIT	
B1	VHD1118	SCREW	
B2	VHD1118	SCREW	
B3	VHD0842	SCREW	
B4	VHD0843	SCREW	
B5	VHD0843	SCREW	
B6	VHD0844	SCREW	
B7	VHD0844	SCREW	
B8	VHD1066	SCREW	
B9	VHD1066	SCREW	
B10	VHD1044	SCREW	
B11	VHD1060	SCREW	
B12	VHD1071	SCREW	
B13	XTS26+6F	SCREW	
B14	XTN26+6F	SCREW	
B15	XTN26+7J	SCREW	
B16	XTN26+7J	SCREW	
B17	XTN26+7J	SCREW	
B18	VHD1095	SCREW	
B19	VHD1185	SCREW	
B20	XTV26+6FFZJ	SCREW	
N1	VHN0311	PUSH NUT	
W1	VMX2208	WASHER	
W2	VMX3022	WASHER	
W3	VMX3022	WASHER	
W4	VMX2699	WASHER	

11.2. CASING PARTS SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. " [MAVD] " in the Remarks column shows that the parts is/are supplied from MAVD.

Ref. No.	Part No.	Part Name & Description	Remarks
101	VGM1834	TOP PANEL	[MAVD]
102	VYP8543	FRONT PANEL (1) UNIT	[MAVD]
103	RKA0072-K	FOOT	
104	RKA0072-K	FOOT	
105	VKA0371	LEG	[MAVD]
106	VKA0371	LEG	[MAVD]
107	VGB0554	SUPER DRIVE BADGE	
108	VKF3643	BLINDER PANEL	[MAVD]
109	VMB2521	BLINDER SPRING	
110	VKF3575	DOOR	[MAVD]
111	VGU9141	JOG DIAL	[MAVD]
112	VXU1617	SHUTTLE RING UNIT	[MAVD]
115	VKU0575	BOTTOM PLATE	[MAVD]
116	VMZ3099	VO SHEET	[MAVD]
120	VWJ1477	FLAT CARD CABLE (6P)	[MAVD] P4002-A/C HEAD
121	VWJ1476	FLAT CARD CABLE (9P)	[MAVD] P2502-P2901
123	VWJ16AW170MM	FLAT CARD CABLE (16P)	[MAVD] P6001-P7701
124	VWJ12AW120MM	FLAT CARD CABLE (12P)	[MAVD] P6004-P7702
B101	XTW3+10TFC	SCREW	
B102	XTW3+10TFC	SCREW	
B103	XTW3+10TFC	SCREW	
B104	XTW3+10TFC	SCREW	
B105	VHD0168	SCREW	
B106	VHD0168	SCREW	
B107	VHD1092	SCREW	
B108	VHD1092	SCREW	
B109	VHD1092	SCREW	
B110	VHD1092	SCREW	
B111	VHD1092	SCREW	
B112	VHD1092	SCREW	
B113	VHD1092	SCREW	
B114	XTN26+6JR	SCREW	
B115	XTV26+8FR	SCREW	
B116	XTV26+8FR	SCREW	
B117	XTV26+8FR	SCREW	
B118	XTV3+6JFZ	SCREW	

11.3. PACKING PARTS SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. " [MAVD] " in the Remarks column shows that the parts is/are supplied from MAVD.

Ref. No.	Part No.	Part Name & Description	Remarks
201	VQT9616	OPERATING INSTRUCTIONS (SPANISH)	⚠ [MAVD] NV-HS930EG-S/EC-S
201	VQT9617	OPERATING INSTRUCTIONS (DANISH)	⚠ [MAVD] NV-HS930EG-S/EC-S
201	VQT9618	OPERATING INSTRUCTIONS (PORTUGUESE)	⚠ [MAVD] NV-HS930EG-S
201	VQT9619	OPERATING INSTRUCTIONS (SPANISH)	⚠ [MAVD] NV-HS930EC-S
201	VQT9620	OPERATING INSTRUCTIONS (DANISH/ FINNISH)	⚠ [MAVD] NV-HS930EC-S
201	VQT9621	OPERATING INSTRUCTIONS (PORTUGUESE)	⚠ [MAVD] NV-HS930EC-S
201	VQT9622	OPERATING INSTRUCTIONS (ENGLISH)	⚠ [MAVD] NV-HS930B-S
201	VQT9931	OPERATING INSTRUCTIONS (ENGLISH/ POLISH)	⚠ [MAVD] NV-HS930EE-S
201	VQT9932	OPERATING INSTRUCTIONS (CZECHOSLOVAK/HUNGARIAN/ RUSSIAN)	⚠ [MAVD] NV-HS930EE-S
202	N2QAKB000040	REMOTE CONTROLLER	[MAVD] NV-HS930EG-S/EC-S/EE-S
202	N2QAKB000041	REMOTE CONTROLLER	[MAVD] NV-HS930B-S
203	R0186-720010	BATTERY COVER	[MAVD]
205	VJA0728-A	DIN RF CABLE	[MAVD]
206	RJA0043	AC CORD	⚠ [MAVD] NV-HS930EG-S/EC-S/EE-S
206	RJA0044	AC CORD	⚠ [MAVD] NV-HS930B-S
210	VPK2246	ACCESSORIES PACKING	[MAVD]
211	VPN5555	CUSHION (L)	[MAVD]
212	VPN5554	CUSHION (R)	[MAVD]
215	VPG0M92	PACKING	[MAVD]
		SERVICE FIXTURES & TOOLS	
	VFJ8125H3F	VHS ALIGNMENT TAPE (PAL)	
	VFK0335	RETAINING RING REMOVER (3mm/ 4mm)	
	VFK0329	POST ADJUSTMENT SCREWDRIVER	
	VFK0326	HEX WRENCH SET	
	VFK0132	BACK TENSION METER	
	VFK27	HEAD CLEANING STICK	
	VFK1024	MOLYTONE GREASE	
	VFK0330	FINE ADJUSTMENT GEAR DRIVER	
	VFK1301	SILICONE GREASE	
	VFK1298	FLOIL GREASE	

11.4. ELECTRICAL PARTS LIST

Note: 1. Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE: Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Unless otherwise specified.
All resistors are in OHMS, K=1,000 OHMS. All capacitors are in MICROFARADS (uf), P=uuF.
4. The P.C. Board units marked width "■" show below the main assembled parts.
5. The marking (RTL) indicaters the retention time is limited for this item.
After the discontinuation of this assembly in production, it will no longer be available.
6. " [MAVD] " in the Remarks column shows that the parts is/are supplied from MAVD.
7. " *1 ", " *2 ", " *3 ", " *4 " in the Remarks column shows the models as follows.
" *1 ": NV-HS930EG-S
" *2 ": NV-HS930B-S
" *3 ": NV-HS930EC-S
" *4 ": NV-HS930EE-S

Ref. No.	Part No.	Part Name & Description	Remarks
■	VEP06E67F	MAIN C.B.A.	(RTL)[MAVD] *1
			THE FOLLOWING C.B.A.S ARE INCLUDED IN MAIN C.B.A.
			VEP07A16A, VEP07A23S
■	VEP06E67G	MAIN C.B.A.	(RTL)[MAVD] *2
			THE FOLLOWING C.B.A.S ARE INCLUDED IN MAIN C.B.A.
			VEP07A18X, VEP07A23T
■	VEP06E67H	MAIN C.B.A.	(RTL)[MAVD] *3
			THE FOLLOWING C.B.A.S ARE INCLUDED IN MAIN C.B.A.
			VEP07A18R, VEP07A23S
■	VEP06E67Q	MAIN C.B.A.	(RTL)[MAVD] *4
			THE FOLLOWING C.B.A.S ARE INCLUDED IN MAIN C.B.A.
			VEP07A18T, VEP07A23U
■	VEP07A16A	DECODER PACK C.B.A.	(RTL)[MAVD] *1
			INCLUDED IN MAIN C.B.A.(VEP06E67F).
■	VEP07A18X	NICAM DECODER PACK C.B.A.	(RTL)[MAVD] *2
			INCLUDED IN MAIN C.B.A.(VEP06E67G).
■	VEP07A18R	NICAM DECODER PACK C.B.A.	(RTL)[MAVD] *3
			INCLUDED IN MAIN C.B.A.(VEP06E67H).
■	VEP07A18T	NICAM DECODER PACK C.B.A.	(RTL)[MAVD] *4
			INCLUDED IN MAIN C.B.A.(VEP06E67Q).
■	VEP07A23S	TV DEMODULATOR PACK C.B.A.	(RTL)[MAVD] *1, *3
			INCLUDED IN MAIN C.B.A.(VEP06E67F/H).
■	VEP07A23T	TV DEMODULATOR PACK C.B.A.	(RTL)[MAVD] *2
			INCLUDED IN MAIN C.B.A.(VEP06E67G).
■	VEP07A23U	TV DEMODULATOR PACK C.B.A.	(RTL)[MAVD] *4
			INCLUDED IN MAIN C.B.A.(VEP06E67Q).
■	VEP03G10E	INPUT/OUTPUT C.B.A.	(RTL)[MAVD]
■	VEP03G11A	TBC/DNR C.B.A.	(RTL)[MAVD] *1, *3, *4
■	VEP03G11B	TBC/DNR C.B.A.	(RTL)[MAVD] *2

Ref. No.	Part No.	Part Name & Description	Remarks
■	VEP04801A	FRONT C.B.A.	(RTL)[MAVD]
■	VEP07A48A	OSD/CNR C.B.A.	(RTL)[MAVD]
■	VEP06E13A	JOG C.B.A.	(RTL)[MAVD]
■	----------	CYLINDER STATOR C.B.A.	INCLUDED IN CYLINDER MOTOR UNIT (VEM0715).
■	----------	CAPSTAN DRIVE C.B.A.	INCLUDED IN CAPSTAN UNIT (VEK9069).
■	VEP06E67F	MAIN C.B.A.	(RTL)[MAVD] *1
■	VEP06E67G	MAIN C.B.A.	(RTL)[MAVD] *2
■	VEP06E67H	MAIN C.B.A.	(RTL)[MAVD] *3
■	VEP06E67Q	MAIN C.B.A.	(RTL)[MAVD] *4
C0701	ECJ2VF1C105Z	C.CAPACITOR CH 16V 1U	
C0702	ECJ1VB1H102K	C.CAPACITOR CH 50V 1000P	
C0703	ECJ2YB1A105K	C.CAPACITOR CH 10V 1U	
C0704	ECJ2VB1E333K	C.CAPACITOR CH 25V 0.033U	
C0707	ECEA1HKS2R2	E.CAPACITOR 50V 2.2U	
C0708	ECEA1HKAR47B	E.CAPACITOR 50V 0.47U	
C0710	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C0711	ECEA1CKS220	E.CAPACITOR 16V 22U	
C0712	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C0713	ECEA0JKS331	E.CAPACITOR 6.3V 330U	
C0714	ECJ2VF1C105Z	C.CAPACITOR CH 16V 1U	
C0715	ECJ1VC1H030C	C.CAPACITOR CH 50V 3P	*1, *3, *4
C0715	ECJ1VC1H120J	C.CAPACITOR CH 50V 12P	*2
C0717	ECUM1H330GUV	C.CAPACITOR CH 50V 33P	
C0719	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	F1H1E104A026
C0721	ECJ1VC1H121J	C.CAPACITOR CH 50V 120P	[MAVD] *1, *3
C0721	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	*2
C0721	ECJ1VC1H560J	C.CAPACITOR CH 50V 56P	*4
C0724	ECJ1VB1H221K	C.CAPACITOR CH 50V 220P	*1, *3, *4
C0724	ECUX1H331KBV	C.CAPACITOR CH 50V 330P	*2
C1002	EEUEB1H220SB	E.CAPACITOR 50V 22U	[MAVD]
C1003	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C1004	F2A1C470A015	E.CAPACITOR 16V 47U	
C1006	ECEA1HKA4R7B	E.CAPACITOR 50V 4.7U	
C1007	ECJ1VB1H102K	C.CAPACITOR CH 50V 1000P	
C1008	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C1009	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C1011	EEUEB1E470SB	E.CAPACITOR 25V 47U	[MAVD]
C1016	ECA1EHJ470	E.CAPACITOR 25V 47U	[MAVD]
C1018	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C1019	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C1020	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C1021	ECEA1CKS220	E.CAPACITOR 16V 22U	
C1024	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	

0102	[illegible]	[illegible]	

Ref. No.	Part No.	Part Name & Description	Remarks
C1025	ECJ2YB1H104K	C.CAPACITOR CH 50V 0.1U	[MAVD]
C1026	ECJ2YB1H104K	C.CAPACITOR CH 50V 0.1U	[MAVD]
C1027	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C1028	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C1101	VCF2AAF683M	X2 CAPACITORS	⚠ [MAVD]
C1102	F1BAF1020020	CERAMIC CAPACITOR	⚠ [MAVD]
C1106	EEUEB2G330E	E.CAPACITOR 400V 33U	[MAVD]
C1107	F1A3A271A028	C.CAPACITOR 1KV 270P	F1A3A271A034
C1108	ECQB1H223JF3	P.CAPACITOR 50V 0.022U	
C1109	ECQB1H473JF3	P.CAPACITOR 50V 0.047U	
C1110	ECQV1H104JL3	P.CAPACITOR 50V 0.1U	
C1111	ECQB1H103JZ	P.CAPACITOR 50V 0.01U	
C1112	F1BAF1020020	CERAMIC CAPACITOR	⚠ [MAVD]
C1201	F1B3A332A004	C.CAPACITOR 1KV 3300P	[MAVD]
C1202	F2A1H560A101	E.CAPACITOR 50V 56U	[MAVD]
C1203	EEUFG1E821	E.CAPACITOR 25V 820U	[MAVD]
C1204	EEUFG1A272	E.CAPACITOR 10V 2700U	[MAVD]
C1205	F2A1H560A101	E.CAPACITOR 50V 56U	[MAVD]
C1206	F2A1A101A089	E.CAPACITOR 10V 100U	[MAVD]
C1207	ECQV1H104JL3	P.CAPACITOR 50V 0.1U	
C1208	ECA1AHJ331	E.CAPACITOR 10V 330U	[MAVD]
C1209	ECA1EM101	E.CAPACITOR 25V 100U	
C1501	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C2502	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C2503	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C2505	ECJ1VB1C563K	C.CAPACITOR CH 16V 0.056U	
C2506	ECJ1VB1C563K	C.CAPACITOR CH 16V 0.056U	
C2507	ECJ1VB1C563K	C.CAPACITOR CH 16V 0.056U	
C2508	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C2509	ECJ1VF1C474Z	C.CAPACITOR CH 16V 0.47U	
C2510	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	[MAVD]
C2511	ECEA0JKN220B	E.CAPACITOR 6.3V 22U	
C2512	ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	
C2513	ECJ1VB1H392K	C.CAPACITOR CH 50V 3900P	
C2514	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C2515	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C2516	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C2518	ECJ2VF1E104Z	C.CAPACITOR CH 25V 0.1U	
C2519	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	
C2520	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	
C2521	ECJ2VB1C224K	C.CAPACITOR CH 16V 0.22U	
C2522	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C2523	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C2524	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C2525	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C2526	ECA0JHJ221	E.CAPACITOR 6.3V 220U	[MAVD]
C3001	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3002	ECJ1VC1H151J	C.CAPACITOR CH 50V 150P	
C3003	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	
C3005	ECJ1VC1H270J	C.CAPACITOR CH 50V 27P	
C3006	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3007	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
C3008	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	

Ref. No.	Part No.	Part Name & Description	Remarks
C3009	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3010	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3011	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3012	ECJ2VB1C224K	C.CAPACITOR CH 16V 0.22U	
C3013	F1J1C105A091	C.CAPACITOR 16V 1U	
C3014	F1J1A335A005	C.CAPACITOR 10V 3.3U	
C3015	ECEA1HKS010	E.CAPACITOR 50V 1U	
C3016	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C3017	F1J1C105A091	C.CAPACITOR 16V 1U	
C3018	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3019	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	
C3020	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C3021	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
C3025	F1J1A335A005	C.CAPACITOR 10V 3.3U	
C3026	ECJ1VC1H050C	C.CAPACITOR CH 50V 5P	
C3027	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	
C3028	ECJ2YB1C474K	C.CAPACITOR CH 16V 0.47U	
C3029	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3030	ECJ2VB1C224K	C.CAPACITOR CH 16V 0.22U	
C3031	ECJ2YB1A225K	C.CAPACITOR CH 10V 2.2U	[MAVD]
C3032	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	
C3033	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3034	ECUX1C333KBV	C.CAPACITOR CH 16V 0.033U	
C3035	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C3036	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3037	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C3038	F1J1C105A091	C.CAPACITOR 16V 1U	
C3039	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C3040	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C3041	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C3043	ECEA1CKS100	E.CAPACITOR 16V 10U	
C3044	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3047	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3048	ECEA1CKS100	E.CAPACITOR 16V 10U	
C3049	ECJ2YB1A105K	C.CAPACITOR CH 10V 1U	
C3050	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3051	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3053	F1J1C105A091	C.CAPACITOR 16V 1U	
C3057	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	
C3058	ECJ1VC1H151J	C.CAPACITOR CH 50V 150P	
C3059	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3060	ECJ1VF1A105Z	C.CAPACITOR CH 10V 1U	
C3062	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3068	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3069	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3501	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C3502	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C3503	ECUX1H221GCV	C.CAPACITOR CH 50V 220P	[MAVD]
C3504	ECUV1H271GCN	C.CAPACITOR CH 50V 270P	ECJ2VC1H271G
C3505	ECUV1H271GCN	C.CAPACITOR CH 50V 270P	ECJ2VC1H271G
C3506	ECUV1H820GCN	C.CAPACITOR CH 50V 82P	ECJ2VC1H820G
C3507	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3508	ECUV1H271GCN	C.CAPACITOR CH 50V 270P	ECJ2VC1H271G
C3509	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]

Ref. No.	Part No.	Part Name & Description	Remarks
C3510	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C3511	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C3512	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C3513	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C3515	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C3516	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3517	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3518	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C3521	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C4001	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4002	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4003	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4004	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4005	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C4006	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C4007	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C4008	ECJ1VB1H822K	C.CAPACITOR CH 50V 8200P	
C4009	ECEA0JKS220	E.CAPACITOR 6.3V 22U	
C4010	ECEA1EKS3R3	E.CAPACITOR 25V 3.3U	
C4012	ECJ1VB1H122K	C.CAPACITOR CH 50V 1200P	
C4013	ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	
C4014	ECJ1VB1H472K	C.CAPACITOR CH 50V 4700P	
C4015	ECEA0JKS220	E.CAPACITOR 6.3V 22U	
C4016	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C4017	ECJ1VC1H101J	C.CAPACITOR CH 50V 100P	
C4018	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	ECJ1XC1H221J
C4019	ECQV1H154JL	P.CAPACITOR 50V 0.15U	
C4020	ECEA1AKS470	E.CAPACITOR 10V 47U	
C4021	ECJ1VB1H472K	C.CAPACITOR CH 50V 4700P	
C4022	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	
C4023	ECEA1AKS220	E.CAPACITOR 10V 22U	
C4024	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4025	ECEA1AKS220	E.CAPACITOR 10V 22U	
C4026	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	
C4027	ECJ1VB1H222K	C.CAPACITOR CH 50V 2200P	
C4028	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C4029	ECQB1H223JF3	P.CAPACITOR 50V 0.022U	
C4501	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4502	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4503	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4504	ECQB1H473JF3	P.CAPACITOR 50V 0.047U	
C4505	ECEA1AKS330	E.CAPACITOR 10V 33U	
C4506	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4507	ECEA1CKS220	E.CAPACITOR 16V 22U	
C4508	ECQB1H153JF3	P.CAPACITOR 50V 0.015U	
C4509	ECUX1C333KBV	C.CAPACITOR CH 16V 0.033U	
C4511	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C4514	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C4515	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C4516	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C4517	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4519	ECJ2VB1C224K	C.CAPACITOR CH 16V 0.22U	
C4520	ECQB1H153JF3	P.CAPACITOR 50V 0.015U	
C4521	ECEA0JKS220	E.CAPACITOR 6.3V 22U	

Ref. No.	Part No.	Part Name & Description	Remarks
C4522	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4523	ECEA1AKS330B	E.CAPACITOR 10V 33U	
C4524	ECQB1H473JF3	P.CAPACITOR 50V 0.047U	
C4525	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C4526	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C4529	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4530	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4531	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4532	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4533	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4534	ECEA1CKA470	E.CAPACITOR 16V 47U	
C4535	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4536	ECEA1CKS220	E.CAPACITOR 16V 22U	
C4538	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4539	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C4540	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4541	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4544	ECJ1VC1H101J	C.CAPACITOR CH 50V 100P	
C4545	ECJ1VC1H101J	C.CAPACITOR CH 50V 100P	
C5002	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C5003	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C5004	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C5005	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C5006	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C5007	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C5008	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C5009	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C5010	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C6001	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C6002	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	
C6003	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	ECJ1XC1H471J
C6004	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C6005	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C6006	ECJ1VC1H121J	C.CAPACITOR CH 50V 120P	[MAVD]
C6007	ECJ1VC1H151J	C.CAPACITOR CH 50V 150P	
C6009	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	
C6010	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	
C6011	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	
C6012	ECJ1VC1H150J	C.CAPACITOR CH 50V 15P	
C6013	ECJ2YB1A105K	C.CAPACITOR CH 10V 1U	
C6014	ECJ1VB1H102K	C.CAPACITOR CH 50V 1000P	
C6015	ECEA1CKS100	E.CAPACITOR 16V 10U	
C6016	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C6017	ECUX1H681JCV	C.CAPACITOR CH 50V 680P	
C6018	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	
C6019	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C6020	ECJ2VF1C105Z	C.CAPACITOR CH 16V 1U	
C6021	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	
C6022	ECUV1H221JCN	C.CAPACITOR CH 50V 220P	ECJ2VC1H221J
C6023	ECJ2VF1C105Z	C.CAPACITOR CH 16V 1U	
C6024	ECEA1AKS221	E.CAPACITOR 10V 220U	
C6025	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C6026	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C6033	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	ECJ1XC1H221J

Ref. No.	Part No.	Part Name & Description	Remarks
C6034	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	ECJ1XC1H221J
C6035	ECJ2YB1A105K	C.CAPACITOR CH 10V 1U	
C6036	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	ECJ1XC1H561J
C6037	ECUV1H221JCN	C.CAPACITOR CH 50V 220P	ECJ2VC1H221J
C6040	ECJ1VC1H101J	C.CAPACITOR CH 50V 100P	
C6041	ECJ1VC1H101J	C.CAPACITOR CH 50V 100P	
C6042	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7301	ECUV1H103KBN	C.CAPACITOR CH 50V 0.01U	*1 ECJ2VB1H103K
C7301	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	*2, *3, *4
C7302	ECEA1HKNR47B	E.CAPACITOR 50V 0.47U	*1
C7303	ECEA1HKNR47B	E.CAPACITOR 50V 0.47U	*1
C7304	ECUV1H681JCN	C.CAPACITOR CH 50V 680P	*1
C7304	F2A0J1010027	E.CAPACITOR 6.3V 100U	*2, *3, *4
C7305	ECUX1H123KBN	C.CAPACITOR CH 50V 0.012U	[MAVD] *1
C7305	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	[MAVD] *2, *3, *4
C7306	ECUX1H123KBN	C.CAPACITOR CH 50V 0.012U	[MAVD] *1
C7306	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	[MAVD] *2, *3, *4
C7307	ECUV1H681JCN	C.CAPACITOR CH 50V 680P	*1
C7307	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	*2, *3, *4
C7308	ECEA1HKNR47B	E.CAPACITOR 50V 0.47U	*1
C7308	ECEA1HKS2R2	E.CAPACITOR 50V 2.2U	*2, *3, *4
C7309	ECUV1H103KBN	C.CAPACITOR CH 50V 0.01U	*1 ECJ2VB1H103K
C7310	ECUV1H103KBN	C.CAPACITOR CH 50V 0.01U	*1 ECJ2VB1H103K
C7311	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	*2, *3, *4
C7312	ECEA1CKS100	E.CAPACITOR 16V 10U	*1
C7312	ECJ1VC1H220J	C.CAPACITOR CH 50V 22P	*2, *3, *4
C7313	ECEA1CKS100	E.CAPACITOR 16V 10U	*1
C7313	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	*2, *3, *4
C7315	ECJ2VB1E104K	C.CAPACITOR CH 25V 0.1U	*2, *3, *4
C7316	ECJ2VF1H104Z	C.CAPACITOR CH 50V 0.1U	*1
C7316	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	*2, *3, *4
C7317	ECEA0JKS101	E.CAPACITOR 6.3V 100U	*1
C7317	F2A1C100A009	E.CAPACITOR 16V 10U	*2, *3, *4
C7318	ECEA1CKS100	E.CAPACITOR 16V 10U	*1
C7318	F2A0J470A011	E.CAPACITOR 6.3V 47U	*2, *3, *4
C7319	ECEA1CKA470	E.CAPACITOR 16V 47U	*1
C7319	F2A1C100A009	E.CAPACITOR 16V 10U	*2, *3, *4
C7320	ECJ2VB1H472K	C.CAPACITOR CH 50V 4700P	[MAVD] *1
C7320	F2A1C100A009	E.CAPACITOR 16V 10U	*2, *3, *4
C7321	ECEA1HKAR47B	E.CAPACITOR 50V 0.47U	*1
C7322	ECEA1HKNR47B	E.CAPACITOR 50V 0.47U	*1
C7323	ECJ2YB1H104K	C.CAPACITOR CH 50V 0.1U	[MAVD] *1
C7324	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	*2, *3, *4
C7325	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	*2, *3, *4
C7326	ECUM1H152KBM	C.CAPACITOR CH 50V 1500P	*1
C7327	ECUM1H152KBM	C.CAPACITOR CH 50V 1500P	*1
C7328	ECUM1H152KBM	C.CAPACITOR CH 50V 1500P	*1
C7341	ECJ1VB1H472K	C.CAPACITOR CH 50V 4700P	*2, *3, *4
C7342	ECJ1VB1H472K	C.CAPACITOR CH 50V 4700P	*2, *3, *4
C7343	ECJ1VB1H222K	C.CAPACITOR CH 50V 2200P	*2, *3, *4
C7501	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7502	ECEA1HKS100	E.CAPACITOR 50V 10U	
C7503	ECJ1VC1H120J	C.CAPACITOR CH 50V 12P	
C7504	ECEA0JKS101	E.CAPACITOR 6.3V 100U	

Ref. No.	Part No.	Part Name & Description	Remarks
C7507	VCE0073	SUPER CAPACITOR	
C7508	ECEA1AKS221	E.CAPACITOR 10V 220U	
C7509	ECJ1VB1H682K	C.CAPACITOR CH 50V 6800P	
C7510	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7511	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7601	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C7602	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C7605	ECEA1HKS010	E.CAPACITOR 50V 1U	
C7610	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	[MAVD]
C7611	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	[MAVD]
C7612	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C7613	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7615	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	*4
C7619	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7620	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7652	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	*2, *3, *4
D0702	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
D1002	MA4056N-H	DIODE	MAZ4056NH
D1003	MA4051N-L	DIODE	
D1004	B0EAKL000031	DIODE	
D1005	MA4056N-H	DIODE	MAZ4056NH
D1007	MA4130N-L	DIODE	MAZ4130NL
D1008	B0EAKL000031	DIODE	
D1009	MA4033H	DIODE	[MAVD]
D1010	MA2C165001VT	DIODE	
D1101	ERZVA5Z471	TRANSIENT/SURGE ABSORBER	⚠
D1103	DF08S-6622	DIODE	B0KB00000013
D1104	MAZ40270LF	DIODE	[MAVD]
D1105	MA2C165001VT	DIODE	
D1106	MA2C18500E	DIODE	[MAVD]
D1107	MAZ751000C	DIODE	
D1108	AU01Z	DIODE	B0HAGM000006
D1201	MA2C18500E	DIODE	[MAVD]
D1204	21DQ10FC4	DIODE	B0JAML000007
D1208	MA2C18500E	DIODE	[MAVD]
D1209	11EQS04	DIODE	B0JAME000020
D1213	31DQ04	DIODE	B0JAPE000004
D1501	SIR505S	DIODE	B3EA00000040
D2501	MA2C165001VT	DIODE	
D2502	MA2C165001VT	DIODE	
D3001	B0ACCK000005	DIODE	
D3002	AU01Z	DIODE	B0HAGM000006
D4502	MA2C165001VT	DIODE	
D6003	B0ACCK000005	DIODE	
D6004	B0ACCK000005	DIODE	
D7501	MAZ4220NMF	DIODE	[MAVD]
D7503	B0JACE000001	DIODE	
D7601	MA4300M	DIODE	MAZ43000M
D7602	MA2C165001VT	DIODE	*1
D7603	MA2C165001VT	DIODE	*1
DP7501	A2BD00000040	DISPLAY TUBE	

Ref. No.	Part No.	Part Name & Description	Remarks
F1101	K5D162BK0005	FUSE	⚠
FL7301	VLF0633	FILTER	*2, *3, *4 J0HACK000008
IC0701	LA75503	IC	C1AA00000606
IC1001	UPC1093J	IC	C0DAEMC00002
IC1201	UPC1093J	IC	C0DAEMC00002
IC1501	RPI354N	IC	B3EZ00000001
IC1502	RPI354N	IC	B3EZ00000001
IC2501	C1AB00001331	IC	[MAVD] C1AB00001332
IC3001	C1AB00001299	IC	[MAVD]
IC3002	C1AB00001340	IC	[MAVD] C1AB00001341
IC3501	AN3293S	IC	
IC3502	M52065FP	IC	C1AB00000739
IC4501	AN3656NFBPBV	IC	
IC6001	C2CBJG000217	IC	[MAVD]
IC6002	C3EAJC000015	IC	[MAVD]
IC6004	C1AB00001486	IC	[MAVD]
IC7301	C0ZBZ0000580	IC	[MAVD] *1
IC7301	TDA9874AH	IC	*2, *3, *4 C1AB00001404
IC7302	PST7043	IC	*2, *3, *4 C0EAH0000051
IC7501	M35502AFP	IC	
IC7503	C0EBE0000211	IC	[MAVD]
IC7504	C0EBH0000218	IC	[MAVD]
K0701	ECJ1VC1H560J	C.CAPACITOR CH 50V 56P	*1, *3
K0703	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K0707	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K0709	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K1213	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3001	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3003	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3005	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3006	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3016	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3017	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3025	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3026	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3028	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3035	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K4001	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K4004	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K5001	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K6003	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7301	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7302	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	*2, *3, *4 D0GBR00JA017
K7303	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	*2, *3, *4 D0GBR00JA017
K7501	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7601	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7609	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7611	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7612	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7613	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7614	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017

Ref. No.	Part No.	Part Name & Description	Remarks
K7616	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	*4 D0GBR00JA017
L0701	ELJNAR27JF	CHIP INDUCTOR 0.27UH	*1, *3, *4
L0701	ELJNAR22JF	CHIP INDUCTOR 0.22UH	*2
L0703	ELJNA2R2JF	INDUCTOR 2.2UH	*1, *3, *4
L0703	ELJNA1R8JF	CHIP INDUCTOR	*2
L1101	ELF15N005A	LINE FILTER	⚠
L1102	ELF15N003A	LINE FILTER	⚠
L1201	VLQ0775K220	CHOKE COIL	[MAVD]
L1202	VLQ0775K220	CHOKE COIL	[MAVD]
L2501	VLQ0599J680	COIL 68UH	G0C680JA0026
L3002	VLQ0599J820	COIL 82UH	G0C820JA0026
L3003	VLQ0599J150	COIL 15UH	G0C150JA0026
L3006	VLQ0163J120	COIL 12UH	G1C120J00001
L3007	VLQ0599J390	COIL 39UH	G0C390JA0026
L3008	VLQ0599J560	COIL 56UH	G0C560JA0026
L3010	VLQ0599J560	COIL 56UH	G0C560JA0026
L3013	VLQ0599J181	COIL 180UH	G0C181JA0019
L3015	VLQ0599J560	COIL 56UH	G0C560JA0026
L4002	VLQ0599J680	COIL 68UH	G0C680JA0026
L4003	VLQ0599J680	COIL 68UH	G0C680JA0026
L4501	VLQ0599J1R2	COIL 1.2UH	G0C1R2JA0026
L4502	VLQ0599J1R2	COIL 1.2UH	G0C1R2JA0026
L5001	VLQ0599J560	COIL 56UH	G0C560JA0026
L6001	G0C101JA0019	INDUCTOR	
L6002	VLQ0599JR56	COIL 0.56UH	[MAVD]
L6003	VLQ0599J221	COIL 220UH	G0C221JA0026
L6005	VLQ0599J680	COIL 68UH	G0C680JA0026
L7302	G0C1R0JA0019	INDUCTOR	*2, *3, *4
L7602	G0C330JA0019	INDUCTOR	
L7603	VLQ0599J180	COIL 18UH	G0C180JA0026
L7604	VLQ0599J2R2	COIL 2.2UH	G0C2R2JA0026
L7607	VLQ0599J2R2	COIL 2.2UH	*2, *3, *4 G0C2R2JA0026
L7651	G0C100JA0019	INDUCTOR	*2, *3, *4
LB0701	J0JBC0000041	FILTER	*4
LB1104	J0JKB0000028	FILTER	J0JKB0000027
LB1105	J0JKB0000028	FILTER	J0JKB0000027
LB1106	J0JHC0000070	FILTER	[MAVD]
LB1111	J0JHC0000070	FILTER	[MAVD]
LB4001	J0JBC0000070	FILTER	[MAVD]
LB4002	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
LB4003	J0JBC0000070	FILTER	[MAVD]
LB4004	J0JBC0000070	FILTER	[MAVD]
LB4005	J0JBC0000070	FILTER	[MAVD]
LB5001	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
LB5002	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
LB5003	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
LB5004	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
LB5005	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
LB5006	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
LB7301	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	*2, *3, *4 D0GBR00JA017
LB7303	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	*2, *3, *4 D0GBR00JA017

Ref. No.	Part No.	Part Name & Description	Remarks
LB7602	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
LB7603	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
LR1101	J1ZZA0000001	FILTER	
P1102	K2AA2K000012	AC INLET	⚠ [MAVD]
P1501	VJS3837A002	CONNECTOR (FEMALE) 2P	K1KB02A00035
P2501	VJP3835E012	CONNECTOR (MALE) 12P	[MAVD] K1KA12A00127
P2502	VJS3537A009G	CONNECTOR (FEMALE) 9P	K1MN09A00012
P4002	VJS3537A006G	CONNECTOR (FEMALE) 6P	K1MN06A00034
P4003	VJS3837A002	CONNECTOR (FEMALE) 2P	K1KB02A00035
P5001	VJS3537A010G	CONNECTOR (FEMALE) 10P	K1MN10A00036
P6001	VJS3537A016G	CONNECTOR (FEMALE) 16P	K1MN16A00035
P6004	VJS3537A012G	CONNECTOR (FEMALE) 12P	K1MN12A00033
PK0701	VJR0826E009W	CONNECTOR (MALE) 9P	K1MR09A00028
PK7301	VJR0777B007W	CONNECTOR (MALE) 7P	K1MM07B00002
PK7302	VJR0777B006W	CONNECTOR (MALE) 6P	K1MM06B00002
PP0701	VJP3589E004B	CONNECTOR (MALE) 4P	K1KA04B00135
PP3001	VJP3186A018W	CONNECTOR (MAIL) 18P	K1KA18A00046
PP3002	VJP3042G006W	CONNECTOR (MALE) 6P	[MAVD] K1KA06A00164
PP3901	K1KA03A00157	CONNECTOR	[MAVD]
PP3902	VJP3042G014W	CONNECTOR (MALE) 14P	K1KA14A00098
PP3903	VJP3042G006W	CONNECTOR (MALE) 6P	[MAVD] K1KA06A00164
PP3904	VJP3042G016W	CONNECTOR (MALE) 16P	K1KA16A00113
PP3905	VJP3042G014W	CONNECTOR (MALE) 14P	K1KA14A00098
PP3906	VJP3042G016W	CONNECTOR (MALE) 16P	K1KA16A00113
PP6003	VJP3042G007W	CONNECTOR (MALE) 7P	K1KA07A00084
Q0702	2SD0601A-S	CHIP TRANSISTOR	[MAVD]
Q1001	2SD602A-R	TRANSISTOR	2SD0602AR
Q1002	2SC1959-Y	TRANSISTOR	
Q1003	2SB0710A0L	TRANSISTOR	
Q1004	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q1005	2SC1959-Y	TRANSISTOR	
Q1006	2SC1959-Y	TRANSISTOR	
Q1007	2SD602A-R	TRANSISTOR	2SD0602AR
Q1008	2SC1959-Y	TRANSISTOR	
Q1009	2SC1959-Y	TRANSISTOR	
Q1010	2SC1959-Y	TRANSISTOR	
Q1011	2SC1959-Y	TRANSISTOR	
Q1012	2SC1959-Y	TRANSISTOR	
Q1101	2SK2876	TRANSISTOR	[MAVD]
Q1102	B1DEDR000003	TRANSISTOR	
Q1103	2SC3311ASA	TRANSISTOR	
Q1104	2SD1992A-R	TRANSISTOR	
Q1201	PC123ZY2	PHOTO COUPLER	⚠ B3PBA0000078
Q1501	PNB2301MBV	TRANSISTOR	
Q1502	PNB2301MAV	TRANSISTOR	
Q3001	2SB709A	TRANSISTOR	2SB0709A
Q3002	2SB709A	TRANSISTOR	2SB0709A
Q3003	2SD0601A	CHIP TRANSISTOR	[MAVD]

Ref. No.	Part No.	Part Name & Description	Remarks
Q3007	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q3010	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q3501	2SB709A	TRANSISTOR	2SB0709A
Q3502	2SB709A	TRANSISTOR	2SB0709A
Q4001	2SB0710A0L	TRANSISTOR	
Q4002	2SD602A-R	TRANSISTOR	2SD0602AR
Q4003	2SD1149	TRANSISTOR	
Q4004	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q4005	2SB710A-R	TRANSISTOR	
Q4006	2SD602A-R	TRANSISTOR	2SD0602AR
Q6001	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q6002	2SB709A	TRANSISTOR	2SB0709A
Q6005	XN6501	TRANSISTOR-TRANSISTOR	XN06501
Q6007	2SD1819A0L	TRANSISTOR	
Q6008	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q6010	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q7601	2SD0601A	CHIP TRANSISTOR	[MAVD] *1
QR1002	UN2212	TRANSISTOR-RESISTOR	UNR2212
QR1003	UNR211200L	TRANSISTOR RESISTOR	[MAVD]
QR1006	UNR221100L	TRANSISTOR RESISTOR	
QR3003	UNR221300L	TRANSISTOR RESISTOR	
QR3005	UN2113	TRANSISTOR-RESISTOR	UNR2113
QR3006	UN2113	TRANSISTOR-RESISTOR	UNR2113
QR3007	UNR221100L	TRANSISTOR RESISTOR	
QR3009	UNR221300L	TRANSISTOR RESISTOR	
QR4002	UNR221100L	TRANSISTOR RESISTOR	
QR4003	XN1215	TWIN TRANSISTOR	XN01215
QR4005	UN2111	TRANSISTOR	UNR211100L
QR4501	UN2113	TRANSISTOR-RESISTOR	UNR2113
QR4502	UN2113	TRANSISTOR-RESISTOR	UNR2113
QR4503	XN0121600L	SILICON TRANSISTOR	[MAVD]
QR4504	XN0121600L	SILICON TRANSISTOR	[MAVD]
QR4507	UN2216	TRANSISTOR	UNR2216
QR6001	UN2215	TRANSISTOR-RESISTOR	UNR2215
QR6002	XN1212	TWIN TRANSISTOR	XN01212
QR6004	UNR221100L	TRANSISTOR RESISTOR	
QR6005	UNR221100L	TRANSISTOR RESISTOR	
QR6006	UN211FTX	TRANSISTOR-RESISTOR	UNR211F00L
R0701	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	*2
R0705	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	
R0707	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	
R0708	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	
R0709	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	*4
R0711	ERJ3GEYJ181V	M.RESISTOR CH 1/16W 180	
R0713	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R0714	ERJ3GEYJ562V	M.RESISTOR CH 1/16W 5.6K	*4 D0GB562JA002
R0715	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	
R0717	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	
R0719	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	
R0725	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R0727	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R0728	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	*2

Ref. No.	Part No.	Part Name & Description	Remarks
R0729	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	*1, *2, *3
R0730	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	*1, *3
R0731	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	*4 D0GB101JA002
R0732	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	*4
R0740	ERJ3GEYG471V	M.RESISTOR CH 1/16W 470	*1, *2, *3
R0740	ERJ3GEYG271	M.RESISTOR CH 1/16W 270	*4
R0741	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	
R0742	ERJ8GEYJ151	M.RESISTOR CH 1/8W 150	
R0745	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	
R1001	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	
R1002	ERDS2FJ103	C.RESISTOR 1/4W 10K	
R1003	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R1004	ERDS2FJ102	C.RESISTOR 1/4W 1K	
R1005	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R1006	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R1007	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R1008	ERDS2FJ471	C.RESISTOR 1/4W 470	
R1009	ERDS2FJ471	C.RESISTOR 1/4W 470	
R1010	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R1011	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R1012	ERJ6GEYG622	M.RESISTOR CH 1/10W 6.2K	
R1013	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	
R1014	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R1015	ERDS2TJ682T	C.RESISTOR 1/4W 6.8K	
R1016	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R1017	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R1018	ERJ6GEYG272V	M.RESISTOR CH 1/10W 2.7K	
R1019	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	
R1021	ERJ6GEYG272V	M.RESISTOR CH 1/10W 2.7K	
R1022	ERDS2FJ151	C.RESISTOR 1/4W 150	
R1023	ERDS2FJ103	C.RESISTOR 1/4W 10K	
R1024	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R1025	ERDS2FJ151	C.RESISTOR 1/4W 150	
R1102	ERDS2TJ105T	C.RESISTOR 1/4W 1M	
R1103	ERDS2TJ105T	C.RESISTOR 1/4W 1M	
R1104	ERDS2FJ102	C.RESISTOR 1/4W 1K	
R1105	ERDS2FJ101	C.RESISTOR 1/4W 100	
R1106	ERG2SJ331	M.RESISTOR 2W 330	
R1107	ERDS2FJ101	C.RESISTOR 1/4W 100	
R1108	ERX1SJR51	M.RESISTOR 1W 0.51	
R1109	ER0S2CKF1801	M.RESISTOR 1/4W 180	
R1110	ERDS2FJ104	C.RESISTOR 1/4W 100K	
R1111	ERDS2FJ331	C.RESISTOR 1/4W 330	
R1112	ERDS2FJ3R3	C.RESISTOR 1/4W 3.3	
R1113	ERDS2FJ330	C.RESISTOR 1/4W 33	
R1201	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R1202	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	
R1203	ERJ6GEYG223V	M.RESISTOR CH 1/10W 22K	
R1204	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	
R1205	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R1206	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	
R1207	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	
R1208	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	
R1209	ERJ6GEYG563V	M.RESISTOR CH 1/10W 56K	

Ref. No.	Part No.	Part Name & Description	Remarks
R1501	ERDS2FJ121	C.RESISTOR 1/4W 120	
R1502	ERDS2TJ181	C.RESISTOR 1/4W 180	
R1503	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R1504	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R1505	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R1506	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R2501	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R2502	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R2503	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R2504	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R2505	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	
R2506	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	
R2507	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	
R2508	ERJ6GEYG433	M.RESISTOR CH 1/10W 43K	
R2509	ERDS2FJ331	C.RESISTOR 1/4W 330	
R2511	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	
R2512	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	
R2517	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R2518	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R2519	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R2520	ERJ6GEYJ1R2	M.RESISTOR CH 1/10W 1.2	
R2521	ERJ6GEYJ1R5	M.RESISTOR CH 1/10W 1.5	[MAVD]
R2522	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R2523	ERJ6GEYG912	M.RESISTOR CH 1/10W 9.1K	
R3001	ERJ6GEYG622	M.RESISTOR CH 1/10W 6.2K	
R3003	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	
R3005	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	
R3006	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R3011	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	
R3012	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	
R3014	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	
R3016	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R3017	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R3018	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	
R3019	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R3020	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R3021	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R3022	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	
R3024	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	
R3025	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R3028	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R3029	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R3030	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	
R3035	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R3038	ERJ3GEYG152V	M.RESISTOR CH 1/16W 1.5K	
R3039	ERJ6GEYG751	M.RESISTOR CH 1/10W 750	[MAVD]
R3042	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R3043	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R3044	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R3046	ERJ6GEYJ153V	M.RESISTOR CH 1/10W 15K	
R3047	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R3051	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R3053	ERJ3GEYJ560V	M.RESISTOR CH 1/16W 56	
R3054	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017

Ref. No.	Part No.	Part Name & Description	Remarks
R3055	MCR03PZHJ561	M.RESISTOR CH 1/16W 560	
R3062	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	
R3063	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	
R3064	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	
R3065	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	
R3073	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R3074	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R3076	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R3501	ERJ3GEYG222	M.RESISTOR CH 1/16W 2.2K	
R3502	ERJ6GEYG152V	M.RESISTOR CH 1/10W 1.5K	
R3503	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	
R3504	ERJ3GEYG152V	M.RESISTOR CH 1/16W 1.5K	
R3505	ERJ3GEYG332V	M.RESISTOR CH 1/16W 3.3K	
R3506	ERJ3GEYG332V	M.RESISTOR CH 1/16W 3.3K	
R3507	ERJ3GEYG102V	M.RESISTOR CH 1/16W 1K	
R3508	ERJ3GEYG471V	M.RESISTOR CH 1/16W 470	
R3509	ERJ3GEYG102V	M.RESISTOR CH 1/16W 1K	
R3510	ERJ3GEYJ394V	M.RESISTOR CH 1/16W 390K	
R3511	ERJ3GEYG122	M.RESISTOR CH 1/16W 1.2K	
R3512	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R3513	ER0S2CKF3900	M.RESISTOR 1/4W 39	
R4061	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	
R4062	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R4063	ERJ6GEYJ241	M.RESISTOR CH 1/10W 240	
R4065	ERDS2FJ332	C.RESISTOR 1/4W 3.3K	
R4066	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R4067	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	
R4068	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R4069	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	
R4070	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R4071	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R4072	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R4081	ERJ6GEYJ752	M.RESISTOR CH 1/10W 7.5K	
R4082	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	
R4084	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4085	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R4086	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	
R4087	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4088	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4089	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	
R4090	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4091	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	
R4501	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	
R4502	ERJ3GEYJ563V	M.RESISTOR CH 1/16W 56K	
R4503	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R4504	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R4505	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	
R4506	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	
R4507	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	
R4508	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4509	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	
R4510	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R4511	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4512	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	

Ref. No.	Part No.	Part Name & Description	Remarks
R4513	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	
R4514	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	
R4515	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	
R4516	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	
R4517	ERJ6GEYJ511	M.RESISTOR CH 1/10W 510	
R4518	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4519	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	
R4520	ERJ6GEYJ124V	M.RESISTOR CH 1/10W 120K	
R4521	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4522	ERJ6GEYJ511	M.RESISTOR CH 1/10W 510	
R4523	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R4524	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	
R4525	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R4526	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R4530	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R4531	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R4532	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R4533	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R4534	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	
R4535	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	
R4536	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	
R4537	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R4538	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R4539	ERJ3GEYJ362	M.RESISTOR CH 1/16W 3.6K	
R4540	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	
R4543	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R6001	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R6002	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	
R6004	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	
R6005	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R6008	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	
R6009	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R6010	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R6011	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R6012	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R6013	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R6014	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R6015	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R6016	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R6017	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R6018	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R6019	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R6020	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	
R6021	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R6022	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R6023	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R6024	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R6025	ERJ6GEYJ433V	M.RESISTOR CH 1/10W 43K	
R6026	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	
R6027	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R6028	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R6029	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R6030	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R6031	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6032	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R6033	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	
R6035	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R6036	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R6039	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	
R6040	ERDS2FJ102	C.RESISTOR 1/4W 1K	
R6041	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	
R6043	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R6045	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R6046	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R6047	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R6048	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R6049	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R6062	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R6063	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	
R6064	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	
R6065	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	
R6066	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R6067	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R6068	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R6069	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R6071	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	
R6072	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R6073	ERJ6GEYJ474V	M.RESISTOR CH 1/10W 470K	
R6074	ERDS2FJ471	C.RESISTOR 1/4W 470	
R6075	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R6076	ERJ6GEYJ153V	M.RESISTOR CH 1/10W 15K	
R6077	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	
R6078	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	
R6079	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R6080	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R6081	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R6082	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R7301	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	*1 D0GBR00JA017
R7302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	*2, *3, *4
R7304	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	*1
R7305	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	*1
R7305	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	*2, *3, *4
R7306	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	*1
R7306	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	*2, *3, *4
R7307	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	*1
R7308	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	*1
R7309	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	*1
R7311	ERJ6GEYJ752	M.RESISTOR CH 1/10W 7.5K	*1
R7312	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	*1
R7313	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	*1
R7314	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	*1
R7315	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	*1 D0GBR00JA017
R7316	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	*1
R7316	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	*2, *3, *4
R7317	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	*1 D0GBR00JA017
R7318	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	*1 D0GBR00JA017
R7319	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	*1
R7320	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	*1

Ref. No.	Part No.	Part Name & Description	Remarks
R7324	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	*2, *3, *4
R7325	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	*2, *3, *4
R7327	ERJ3GEYJ822V	M.RESISTOR CH 1/16W 8.2K	*2, *3, *4 D0GB822JA002
R7328	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	*2, *3, *4
R7329	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	*2, *3, *4
R7501	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	
R7502	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R7503	ERJ6GEYJ432V	M.RESISTOR CH 1/10W 4.3K	
R7504	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	
R7505	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R7506	ERJ6GEYJ432V	M.RESISTOR CH 1/10W 4.3K	
R7507	ERDS2FJ680	C.RESISTOR 1/4W 68	
R7508	ERDS2FJ680	C.RESISTOR 1/4W 68	
R7509	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7510	ERDS2FJ821	C.RESISTOR 1/4W 820	
R7511	ERDS2FJ821	C.RESISTOR 1/4W 820	
R7512	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R7513	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	
R7514	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	
R7515	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	
R7516	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	
R7517	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R7518	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R7519	ERJ6GEYJ432V	M.RESISTOR CH 1/10W 4.3K	
R7521	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R7522	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	
R7523	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	
R7533	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R7534	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	
R7535	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R7536	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R7537	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	
R7538	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	
R7601	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R7602	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7603	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7604	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R7605	ERDS2FJ331	C.RESISTOR 1/4W 330	
R7606	ERDS2FJ331	C.RESISTOR 1/4W 330	
R7607	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R7608	ERJ6GEYJ151V	M.RESISTOR CH 1/10W 150	
R7609	ERDS2FJ101	C.RESISTOR 1/4W 100	
R7610	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7612	ERJ6GEYJ151V	M.RESISTOR CH 1/10W 150	
R7613	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	*1
R7614	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	*1
R7615	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7616	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7655	ERDS2FJ222	C.RESISTOR 1/4W 2.2K	
S1501	K0G934A00002	SWITCH	K0ZZ00000452
S1502	VST0325	CASSETTE DET. SWITCH	K0L1BA000026
S7501	EVQ11G07K	SWITCH	
S7502	EVQ11G07K	SWITCH	

Ref. No.	Part No.	Part Name & Description	Remarks
S7503	EVQ11404M	SWITCH	
S7504	EVQ11404M	SWITCH	
S7507	K0C111A00003	SWITCH	
S7508	EVQ11L07B	SWITCH	
S7509	EVQ11L07B	SWITCH	
S7510	EVQ11G07K	SWITCH	
S7512	EVQ11G07K	SWITCH	
S7513	EVQ11L07B	SWITCH	
S7515	EVQ11L07B	SWITCH	
S7516	EVQ11G07K	SWITCH	
T0701	EQV5EC082P	TRANSFORMER	*1, *3
T0701	EQV5EC083P	TRANSFORMER	*2
T0701	EQV5EC081P	TRANSFORMER	*4
T1101	ETS29AZ286AC	SWITCHING TRANSFORMER	⚠ [MAVD]
T4001	EQQ7QF025P	TRANSFORMER	
T4002	EQQ7QF026P	TRANSFORMER	
TU7601	ENG47327G1	TUNER	⚠ [MAVD] *1, *3
TU7601	ENG47328G1	TUNER	⚠ [MAVD] *2
TU7601	ENG47329G1	TUNER	⚠ [MAVD] *4
VR0701	EVNCYAA03B14	V.RESISTOR 10K	
VR7301	EVNCYAA03B14	V.RESISTOR 10K	*1
W504	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	*2, *3, *4
X0701	VLF1416	FILTER	*1, *3 J0B4045A0002
X0701	VLF1417	FILTER	*2 J0B4155A0003
X0701	VLF1430	TRANSFORMER	*4 J0B3955A0001
X0702	VLF1431	TRANSFORMER	*4 J0B4055A0001
X0704	VLF1493	FILTER	*1, *3
X0704	VLF1495	FILTER	*2
X0704	VLF1497	TRANSFORMER	*4
X3001	H0D443400031	CRYSTAL OSCILLATOR	[MAVD]
X6001	VSX1022	CRYSTAL OSCILLATOR	
X6002	H0H200500011	CRYSTAL OSCILLATOR	[MAVD]
X7301	H0H400400006	CRYSTAL OSCILLATOR	*1
X7302	H0D245500016	CRYSTAL OSCILLATOR	[MAVD] *2, *3, *4
		MISCELLANEOUS	
	K3GD9BB00001	FUSE HOLDER	
	K3GD9BB00001	FUSE HOLDER	
	VMP6823	INLET ANGLE	[MAVD]
	VSC5227	HA CASE	[MAVD]
	VSC4998	HA ANGLE	
	VMT0077	CUSHION	
	VMP4894	SUPPORT ANGLE	*1
			FOR DECODER C.B.A.
	VSC4752	SHIELD CASE (MAIN)	*2, *3, *4
			FOR NICAM DECODER C.B.A.
	VMP5897	CONNECTING ANGLE	FOR TV DEMODULATOR C.B.A.

Ref. No.	Part No.	Part Name & Description	Remarks
■	VEP03G10E	INPUT/OUTPUT C.B.A.	(RTL)[MAVD]
C3901	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	
C3902	ECJ1VC1H270J	C.CAPACITOR CH 50V 27P	
C3903	ECJ1VC1H040C	C.CAPACITOR CH 50V 4P	[MAVD]
C3904	ECJ1VC1H150J	C.CAPACITOR CH 50V 15P	
C3905	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3906	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3907	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3908	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3909	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3910	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	
C3911	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3912	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3913	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3914	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3915	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3916	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3917	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3918	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3919	ECEA0JKS331	E.CAPACITOR 6.3V 330U	
C3920	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	
C3921	ECEA0JKS331	E.CAPACITOR 6.3V 330U	
C3922	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3923	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3924	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3926	ECJ2VF1H104Z	C.CAPACITOR CH 50V 0.1U	
C3927	ECEA0JKS331	E.CAPACITOR 6.3V 330U	
C3928	ECJ2VF1H104Z	C.CAPACITOR CH 50V 0.1U	
C3929	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C4901	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	
C4902	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	
C4903	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	ECJ1XC1H471J
C4904	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	ECJ1XC1H471J
C4907	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	
C4908	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	
C4909	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	ECJ1XC1H471J
C4910	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	ECJ1XC1H471J
C4913	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4914	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C4915	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C4916	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	ECJ1XC1H471J
C4918	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	ECJ1XC1H471J
D3901	MA2C165001VT	DIODE	
D3902	MA4075N-M	DIODE	
D3903	MA4075N-M	DIODE	
IC3901	C1AB00001614	IC	[MAVD]
JK3901	VJJ0169	REMOTE CONTROLLER JACK	K2HD103A0003
JK3902	K2HZ105A0002	5P SOCKET	

Ref. No.	Part No.	Part Name & Description	Remarks
JK4901	VJS1470	CONNECTOR (FEMALE) 21P	K1FB121A0002
JK4902	VJS1470	CONNECTOR (FEMALE) 21P	K1FB121A0002
JK4903	VJJ0416	JACK	K2HA307A0001
JK4904	VJJ0574	S TERMINAL	K1CB104A0009
K3901	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3905	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3910	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3917	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3920	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3921	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3922	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
L3901	G0C330JA0019	INDUCTOR	
L3902	VLQ0163J390	COIL 39UH	G1C390J00001
L3903	VLQ0163J820	COIL 82UH	G1C820J00002
L3905	G0C330JA0019	INDUCTOR	
L4901	VLQ0599JR22	COIL 0.22UH	
L4902	G0C330JA0019	INDUCTOR	
LB4901	J0JBC0000041	FILTER	
LB4902	J0JBC0000041	FILTER	
LB4903	J0JBC0000041	FILTER	
LB4904	J0JBC0000041	FILTER	
LB4905	J0JBC0000041	FILTER	
LB4906	J0JBC0000041	FILTER	
LB4908	J0JBC0000041	FILTER	
LB4909	J0JBC0000041	FILTER	
LB4910	J0JBC0000041	FILTER	
LB4911	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
LB4912	J0JBC0000041	FILTER	
LB4913	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
PS3901	K1KB03B00007	CONNECTOR	[MAVD]
PS3902	VJS3042F014W	CONNECTOR (FEMALE) 14P	K1KB14B00018
PS3903	VJS3042F006W	CONNECTOR (FEMALE) 6P	K1KB06B00024
PS3904	VJS3042F016W	CONNECTOR (FEMALE) 16P	K1KB16B00023
PS3905	VJS3042F014W	CONNECTOR (FEMALE) 14P	K1KB14B00018
Q3901	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q3902	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q3903	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q3904	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q4901	2SD13280VL	TRANSISTOR	
Q4902	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q4903	2SB709A	TRANSISTOR	2SB0709A
QR3901	UN2212	TRANSISTOR-RESISTOR	UNR2212
QR3902	UN2215	TRANSISTOR-RESISTOR	UNR2215
QR4901	UN2113	TRANSISTOR-RESISTOR	UNR2113
QR4902	UN2113	TRANSISTOR-RESISTOR	UNR2113
R3901	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R3902	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	

Ref. No.	Part No.	Part Name & Description	Remarks
R3903	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R3904	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R3905	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	
R3906	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R3907	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R3908	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R3909	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R3910	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R3912	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R3913	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R3914	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	
R3915	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R3916	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	
R3917	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R3918	ERJ6GEYJ474V	M.RESISTOR CH 1/10W 470K	
R3919	ERDS2FJ471	C.RESISTOR 1/4W 470	
R3920	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R3921	ERJ6GEYJ153V	M.RESISTOR CH 1/10W 15K	
R3922	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R3923	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R3927	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R3928	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R4901	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R4902	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R4903	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4904	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4905	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4906	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R4907	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R4908	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4909	ERJ6GEYG683	M.RESISTOR CH 1/10W 68K	
R4910	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	
R4911	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	
R4912	ERJ6GEYJ121V	M.RESISTOR CH 1/10W 120	D0GD121JA003
R4913	ERJ6GEYJ121V	M.RESISTOR CH 1/10W 120	D0GD121JA003
R4914	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4915	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4916	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4917	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4918	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4919	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
S4901	VSS0513	SLIDE SWITCH	K0D142A00023
		MISCELLANEOUS	
	XTV3+8GFZ	SCREW	
	XTV3+8GFZ	SCREW	
	XTV3+8GFZ	SCREW	
	VMC1737	RF EARTH SPRING	[MAVD]
	VJH1197	JACK BOARD	[MAVD]
■	VEP03G11A	TBC/DNR C.B.A.	(RTL)[MAVD] *1, *3, *4

Ref. No.	Part No.	Part Name & Description	Remarks
■	VEP03G11B	TBC/DNR C.B.A.	(RTL)[MAVD] *2
C3301	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3302	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3303	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3304	ECJ1VC1H220J	C.CAPACITOR CH 50V 22P	*1, *3, *4
C3305	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3306	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3307	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3308	ECJ1VB1H152K	C.CAPACITOR CH 50V 1500P	
C3309	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3310	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3311	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3312	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3313	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3314	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3315	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3316	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3317	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3318	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3319	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3320	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3321	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3322	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3323	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3324	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	
C3325	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	
C3326	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3327	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3328	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3329	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3330	ECJ1VB1H822K	C.CAPACITOR CH 50V 8200P	
C3331	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3332	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3333	ECJ1VC1H120J	C.CAPACITOR CH 50V 12P	
C3334	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	
C3337	ECEA1CKS470B	E.CAPACITOR 16V 47U	[MAVD]
C3338	ECJ1VC1H120J	C.CAPACITOR CH 50V 12P	
C3340	ECJ1VC1H270J	C.CAPACITOR CH 50V 27P	
C3341	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3342	ECJ1VC1H120J	C.CAPACITOR CH 50V 12P	
C3343	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	
C3344	ECJ1VC1H120J	C.CAPACITOR CH 50V 12P	
C3345	ECJ1VC1H120J	C.CAPACITOR CH 50V 12P	
C3346	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	
C3347	ECJ1VC1H120J	C.CAPACITOR CH 50V 12P	
C3348	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3349	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3350	ECEA1CKS100	E.CAPACITOR 16V 10U	
C3351	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C3352	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3353	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3354	ECJ1VC1H030C	C.CAPACITOR CH 50V 3P	

Ref. No.	Part No.	Part Name & Description	Remarks
C3355	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C3356	ECJ1VC1H220J	C.CAPACITOR CH 50V 22P	*1, *3, *4
C3357	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	*1, *3, *4
C3358	ECJ1VB0J105K	C.CAPACITOR CH 6.3V 1U	*1, *3, *4
C3359	ECEA1CKS100	E.CAPACITOR 16V 10U	*1, *3, *4
C3360	ECEA1CKS100	E.CAPACITOR 16V 10U	*1, *3, *4
C3361	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	*1, *3, *4 ECJ1XC1H561J
C3362	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3363	ECJ1VC1H270J	C.CAPACITOR CH 50V 27P	*1, *3, *4
C3364	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	*1, *3, *4
C3365	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	*1, *3, *4
C3366	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	*1, *3, *4
C3367	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	*1, *3, *4
C3368	ECJ1VC1H120J	C.CAPACITOR CH 50V 12P	*1, *3, *4
C3369	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	*1, *3, *4 ECJ1XC1H390J
C3371	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	ECJ1XC1H390J
C3372	ECUX1H300JCV	C.CAPACITOR CH 50V 30P	
IC3301	C1AB00001631	IC	[MAVD]
IC3302	C0EBE0000205	IC	[MAVD]
IC3303	C0DBCFD00001	IC	
IC3304	C1AB00001486	IC	[MAVD] *1, *3, *4
IC3305	C1AB00001340	IC	[MAVD] *1, *3, *4 C1AB00001341
IC3306	MM1113XFF	IC	[MAVD] *1, *3, *4 C1AB00000601
K3301	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	*2
K3302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3303	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3304	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	*2
K3305	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3306	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3307	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3308	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3309	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3310	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3312	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3313	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3314	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3315	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3316	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3324	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3325	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K3327	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
L3301	VLQ0599J270	COIL 27UH	G0C270JA0026
L3304	G0C220JA0019	INDUCTOR	
L3305	G0C220JA0019	INDUCTOR	
L3306	VLQ0599J270	COIL 27UH	G0C270JA0026
L3307	VLQ0599J270	COIL 27UH	G0C270JA0026
L3308	G0C220JA0019	INDUCTOR	
L3309	G0C101JA0019	INDUCTOR	*1, *3, *4
L3310	VLQ0599J150	COIL 15UH	*1, *3, *4 G0C150JA0026
L3311	VLQ0599J470	COIL 47UH	*1, *3, *4 G0C470JA0026
L3312	VLQ0163J390	COIL 39UH	G1C390J00001

Ref. No.	Part No.	Part Name & Description	Remarks
L3313	VLQ0163J330	COIL 33UH	G1C330J00004
LB3301	J0JCC0000077	FILTER	
LB3303	J0JCC0000077	FILTER	
LB3304	J0JCC0000077	FILTER	
LB3305	J0JCC0000077	FILTER	
LB3306	J0JCC0000077	FILTER	
LB3307	J0JCC0000077	FILTER	
LB3308	J0JCC0000077	FILTER	
LB3309	J0JCC0000077	FILTER	
LB3310	J0JCC0000077	FILTER	
LB3311	J0JCC0000077	FILTER	
PS3301	VJS3042F006W	CONNECTOR (FEMALE) 6P	K1KB06B00024
PS3302	VJS3186B018	CONNECTOR (FEMALE) 18P	K1KB18B00016
Q3301	2SD1819A0L	TRANSISTOR	
Q3302	2SB1218A0L	TRANSISTOR	
Q3303	2SD1819A0L	TRANSISTOR	
Q3304	2SB1218A0L	TRANSISTOR	
Q3305	2SD1819A0L	TRANSISTOR	*1, *3, *4
Q3306	2SB1218A0L	TRANSISTOR	*1, *3, *4
Q3307	2SD1819A0L	TRANSISTOR	
Q3308	2SD1819A0L	TRANSISTOR	
Q3309	2SB1218A0L	TRANSISTOR	*1, *3, *4
Q3310	2SD1819A0L	TRANSISTOR	
Q3311	2SD1819A0L	TRANSISTOR	
Q3312	2SB1218A0L	TRANSISTOR	
Q3313	2SB1218A0L	TRANSISTOR	
Q3314	2SD1819A0L	TRANSISTOR	
Q3315	2SB1218A0L	TRANSISTOR	
Q3316	2SD1819A0L	TRANSISTOR	*1, *3, *4
Q3317	2SB1218A0L	TRANSISTOR	*1, *3, *4
Q3318	2SD1819A0L	TRANSISTOR	*1, *3, *4
Q3319	2SB1218A0L	TRANSISTOR	*1, *3, *4
Q3320	2SD1819A0L	TRANSISTOR	*1, *3, *4
Q3321	2SB1218A0L	TRANSISTOR	*1, *3, *4
QR3301	DTC363EK	DIGITAL TRANSISTOR	
R3301	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	
R3302	ERJ3GEYJ333V	M.RESISTOR CH 1/16W 33K	D0GB333JA002
R3303	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R3305	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	
R3306	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R3307	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	
R3308	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	
R3309	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	
R3310	ERJ3GEYG102V	M.RESISTOR CH 1/16W 1K	
R3311	ERJ3GEYG102V	M.RESISTOR CH 1/16W 1K	
R3312	ERJ3GEYG202	M.RESISTOR CH 1/16W 2K	
R3313	ERJ3GEYG152V	M.RESISTOR CH 1/16W 1.5K	
R3314	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	
R3315	ERJ3GEYG201	M.RESISTOR CH 1/16W 200	

Ref. No.	Part No.	Part Name & Description	Remarks
R3316	ERJ3GEYG621	M.RESISTOR CH 1/16W 620	
R3317	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	
R3318	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	
R3319	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	
R3320	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	
R3321	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	
R3322	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	
R3323	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	
R3324	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	
R3325	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	
R3326	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	
R3327	ERJ3GEYJ122V	M.RESISTOR CH 1/16W 1.2K	
R3328	ERJ3GEYJ122V	M.RESISTOR CH 1/16W 1.2K	
R3329	ERJ3GEYJ751	M.RESISTOR CH 1/16W 750	
R3330	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	
R3331	ERJ3GEYG911	M.RESISTOR CH 1/16W 910	
R3332	ERJ3GEYG102V	M.RESISTOR CH 1/16W 1K	
R3333	ERJ3GEYG621	M.RESISTOR CH 1/16W 620	
R3334	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	
R3335	ERJ3GEYG561	M.RESISTOR CH 1/16W 560	
R3336	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	*1, *3, *4
R3337	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	*1, *3, *4
R3338	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	*1, *3, *4
R3339	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	
R3340	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	
R3343	ERJ3GEYG102V	M.RESISTOR CH 1/16W 1K	*1, *3, *4
R3344	ERJ3GEYG112	M.RESISTOR CH 1/16W 1.1K	*1, *3, *4
R3345	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	*1, *3, *4
R3346	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	*1, *3, *4
R3347	ERJ3GEYG101	M.RESISTOR CH 1/16W 100	*1, *3, *4
R3348	ERJ3GEYG301	M.RESISTOR CH 1/16W 300	*1, *3, *4
R3349	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	*1, *3, *4 D0GB101JA002
R3350	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	*1, *3, *4
R3351	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	*1, *3, *4
R3352	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	*1, *3, *4
R3353	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	*1, *3, *4
R3354	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	*1, *3, *4
R3355	ERJ3GEYJ151V	M.RESISTOR CH 1/16W 150	*1, *3, *4
R3356	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	*1, *3, *4 D0GB101JA002
R3357	ERJ3GEYG111	M.RESISTOR CH 1/16W 110	*1, *3, *4
R3358	ERJ3GEYG121	M.RESISTOR CH 1/16W 120	*1, *3, *4
R3359	MCR03PZHJ561	M.RESISTOR CH 1/16W 560	*1, *3, *4
R3360	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	*1, *3, *4
R3361	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	*1, *3, *4
R3363	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	ERJ3GEYJ680V
R3364	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	D0GB101JA002
R3365	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	D0GB101JA002
		MISCELLANEOUS	
	VSC5228	SHIELD CASE (A)	[MAVD]
	VSC5229	SHIELD CASE (B)	[MAVD]
	XTV26+6F	SCREW	
	XTV26+6F	SCREW	
	VMT0543	CUSHION	[MAVD]

Ref. No.	Part No.	Part Name & Description	Remarks
■	VEP04801A	FRONT C.B.A.	(RTL)[MAVD]
C4803	ECKT1H102KB	C.CAPACITOR 50V 1000P	
C4804	ECKT1H102KB	C.CAPACITOR 50V 1000P	
C4805	ECQV1H104JL3	P.CAPACITOR 50V 0.1U	
D4801	LN38GCPPSVT	LED	
IC4801	PNA4618M10VT	IC	[MAVD]
JK4801	VJJ0573	3-PIN AV JACK	K2HA303A0004
JK4802	VJJ0574	S TERMINAL	K1CB104A0009
PS4801	VJS3042F016W	CONNECTOR (FEMALE) 16P	K1KB16B00023
R4801	ERDS2FJ750	C.RESISTOR 1/4W 75	
R4802	ERDS2FJ471	C.RESISTOR 1/4W 470	
R4803	ERDS2FJ471	C.RESISTOR 1/4W 470	
R4804	ERDS2FJ750	C.RESISTOR 1/4W 75	
R4805	ERDS2FJ750	C.RESISTOR 1/4W 75	
R4807	ERDS2FJ271	C.RESISTOR 1/4W 270	
S4801	EVQ11G07K	SWITCH	
S4802	EVQ11G07K	SWITCH	
S4803	EVQ11G07K	SWITCH	
		MISCELLANEOUS	
	VMC1721	EARTH SPRING	[MAVD]
	VMD0504	LED HOLDER	
	VGQ6104	FRONT PCB HOLDER(L)	
■	VEP07A48A	OSD/CNR C.B.A.	(RTL)[MAVD]
C7701	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7702	ECJ1VC1H101J	C.CAPACITOR CH 50V 100P	
C7703	ECJ1VC1H101J	C.CAPACITOR CH 50V 100P	
C7704	ECJ1VC1H101J	C.CAPACITOR CH 50V 100P	
C7705	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7706	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C7707	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7708	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7709	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7710	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7711	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C7712	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7715	ECJ1VC1H270J	C.CAPACITOR CH 50V 27P	
C7716	ECJ1VC1H270J	C.CAPACITOR CH 50V 27P	
C7717	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7718	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C7720	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	

Ref. No.	Part No.	Part Name & Description	Remarks
C7721	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	
C7722	ECJ2VF1H104Z	C.CAPACITOR CH 50V 0.1U	
C7723	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	
C7724	ECJ2VF1H104Z	C.CAPACITOR CH 50V 0.1U	
C7725	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	
C7726	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	
C7727	ECEA1EKN4R7B	E.CAPACITOR 25V 4.7U	[MAVD]
C7728	ECJ2YB0J475K	C.CAPACITOR CH 6.3V 4.7U	[MAVD]
C7729	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7730	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7731	ECEA1CKS100	E.CAPACITOR 16V 10U	
C7732	ECEA1CKS100	E.CAPACITOR 16V 10U	
C7733	ECEA1CKS100	E.CAPACITOR 16V 10U	
C7734	ECEA1CKS100	E.CAPACITOR 16V 10U	
C7735	ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	
C7736	ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	
C7737	ECEA1CKS100	E.CAPACITOR 16V 10U	
C7738	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7739	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C7740	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
IC7701	C2CBJG000219	IC	[MAVD]
IC7703	C1BA00000060	IC	
K7701	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7702	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7705	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
L7701	VLQ0599J390	COIL 39UH	G0C390JA0026
L7702	G0C101JA0019	INDUCTOR	
L7703	G0C101JA0019	INDUCTOR	
L7704	VLQ0599J390	COIL 39UH	G0C390JA0026
P7701	VJS3537A016G	CONNECTOR (FEMALE) 16P	K1MN16A00035
P7702	VJS3537A012G	CONNECTOR (FEMALE) 12P	K1MN12A00033
Q7701	2SB709A	TRANSISTOR	2SB0709A
Q7702	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q7703	2SD0601A	CHIP TRANSISTOR	[MAVD]
Q7704	2SB709A	TRANSISTOR	2SB0709A
QR7701	XN6116	TRANSISTOR	[MAVD]
R7701	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R7702	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R7703	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R7704	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R7707	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R7708	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	
R7744	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	
R7745	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7746	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7747	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7748	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	

Ref. No.	Part No.	Part Name & Description	Remarks
R7749	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7750	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7751	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R7753	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R7754	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R7755	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7756	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7759	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7760	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7761	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7764	ERJ6GEYJ511	M.RESISTOR CH 1/10W 510	
R7765	ERJ6GEYJ202V	M.RESISTOR CH 1/10W 2K	D0GD202JA003
R7766	ERJ6GEYJ202V	M.RESISTOR CH 1/10W 2K	D0GD202JA003
R7767	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	
R7768	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R7769	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R7770	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R7771	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R7772	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	
R7773	ERJ6GEYG152V	M.RESISTOR CH 1/10W 1.5K	
R7774	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R7775	ERJ6GEYG823	M.RESISTOR CH 1/10W 82K	
R7776	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R7777	ERJ6GEYG823	M.RESISTOR CH 1/10W 82K	
R7778	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R7779	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R7780	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R7781	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R7782	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	
R7783	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	
R7784	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
X7702	VSX1043	CRYSTAL OSCILLATOR	
■	VEP06E13A	JOG C.B.A.	(RTL)[MAVD]
PS6301	VJS3042F007W	CONNECTOR (FEMALE) 7P	K1KB07B00013
S6309	VSQ0817	ENCODER VR	EVQWM6001
		MISCELLANEOUS	
	VGQ6105	FRONT PCB HOLDER(R)	
■	----------	CYLINDER STATOR C.B.A.	
		MISCELLANEOUS	
	VJS3537F009G	CONNECTOR (FEMALE) 9P	K1MN09B00039
	HW-300A-DF	HALL IC	B4AAB0000007

12. SCHEMATIC DIAGRAM FOR PRINTING WITH A4 SIZE

443NT [L]	4.43 NTSC Ⓛ
A. COMP	AUDIO COMPONENT SIGNAL
A. COMPO	AUDIO COMPONENT SIGNAL
A. D.P [L]	AUDIO DUBBING PAUSE Ⓛ
A. D/L [L]	AUDIO DUBBING PAUSE Ⓛ
A. DEF [S]	AUDIO DEFEAT
A. DEF [S] [L]	AUDIO DEFEAT
A. DUB P [L]	AUDIO DUBBING PAUSE Ⓛ
A. DUB [H]	AUDIO DUBBING Ⓗ
A. ERASE	AUDIO ERASE
A. H. SW	AUDIO HEAD SWITCHING PULSE
A. HEAD [R]	AUDIO HEAD (REC)
A. HEAD [W]	AUDIO HEAD (PLAY)
A. IN [L]	AUDIO INPUT (L)
A. IN [R]	AUDIO INPUT (R)
A. MUT [H]	AUDIO MUTE Ⓗ
A. MUTE [H]	AUDIO MUTE Ⓗ
A. OUT [L]	AUDIO OUTPUT (L)
A. OUT [R]	AUDIO OUTPUT (R)
A. RF OUT	AUDIO RF SIGNAL OUTPUT
A/VS/S. DATA	AV SW/SERIAL DATA
AC ONLINE	AC ONLINE
AC. O/EE. H	AC ONLINE/EE Ⓗ
AFC S C	AFC S CURVE
AFC [S]	AFC S CURVE
AFC. DEF	AFC DEFEAT
ARFC OUT	AUDIO RF SIGNAL OUTPUT
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL
ART. V. MM	ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI
ART. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL Ⓗ/NORMAL
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE
AUDIO IN [L]	AUDIO INPUT (L)
AUDIO IN [R]	AUDIO INPUT (R)
AUDIO OUT [L]	AUDIO OUTPUT (L)
AUDIO OUT [R]	AUDIO OUTPUT (R)
AUDIO SELECT [H]	AUDIO SELECT Ⓗ
AUDIO. L	AUDIO (L)
AUDIO. R	AUDIO (R)
AV CNT	AV CONTROL
AV CTL	AV CONTROL
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK
AV. C.M.	AV CONTROL MODE
AVCNT/METER. R	AV CONTROL/LEVEL METER (R)
AVSW/METER. L	AV SW/LEVEL METER (L)
B MODE. H	B MODE Ⓗ
B.G.P	BURST GATE PULSE
BACKUP 5V	BACK UP 5V
BAND. U.E.	BAND U
BANDVL. D	BAND VL
BI/MI [L]	BILINGUAL/MIX Ⓛ
BIL	BILINGUAL
BIL [L]	BILINGUAL Ⓛ
BIL. [H]	BILINGUAL Ⓗ
BIL/M1 [L]	BILINGUAL Ⓛ
BS CLOCK	BS CLOCK
BS DATA	BS DATA
BS LCH IN	BS L CHANNEL INPUT
BS MIX [H]	BS MIX Ⓗ
BS MON [H]	BS MONITOR Ⓗ
BS MONI [H]	BS MONITOR Ⓗ
BS RCH IN	BS R CHANNEL INPUT
BS VIDEO	BS VIDEO SIGNAL
BS VIDEO/BS1	BS VIDEO SIGNAL
BS [H]	BS Ⓗ
BS. LEVEL	BS LEVEL
BS. M [H]	BS MONITOR Ⓗ
BS/VTR [H]	BS/VTR Ⓗ
BUS CLK	BUS CLOCK
BUS LSN	BUS LISTEN
BUS TLK	BUS TALK
BUZZER	BUZZER
CAP EC	CAPSTAN TORQUE CONTROL
CAP M GND	CAPSTAN MOTOR GND
CAP. ET	CAPSTAN TORQUE CONTROL
CAP. FG1	CAPSTAN FG1 PULSE
CAP. FG2	CAPSTAN FG2 PULSE
CAS. SW	CASSETTE SW
CCN	PLAYBACK CONTROL SIGNAL (–)
CCP	PLAYBACK CONTROL SIGNAL (+)
CHM	CONTROL SIGNAL (+)
CHP	CONTROL SIGNAL (–)
CINEM [L]	CINEMA Ⓛ
CINEMA [L]	CINEMA Ⓛ
CINEMA/MIX	CINEMA/MIX
CKL	RATCH LOCK
CKS	SHIFT LOCK
CL	CLOCK
CLK	CLOCK
CLK (C.G)	CLOCK
CLOCK. IN	CLOCK INPUT
CLP	CLAMP
COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
COLOR [H]	COLOUR Ⓗ
CONV	CONVERTOR
CS	CHIP SELECT
CTL GND	CONTROL GND
CTL HEAD [+]	CONTROL HEAD (+)
CTL HEAD [–]	CONTROL HEAD (–)
CTL [+]	CONTROL HEAD (+)
CTL [–]	CONTROL HEAD (–)
CUE BIAS	CUE BIAS
CURRENT LIM	CURRENT LIMMITER
CYL ET	CYLINDER TORQUE CONTROL

CYL GND	CYLINDER GND
D.F.M. REC [H]	DELAIED FM RECORDING Ⓗ
D. FM REC [L]	DELAIED FM RECORDING Ⓛ
D. GND	DIGITAL GND
D. REC [H]	DELAYED RECORDING Ⓗ
D4/S. LED	D4/STILL LED
D4/STILLED	D4/STILL LED
DAC [CLK]	TUNER DAC (CLOCK)
DAC/FSCS	TUNER DAC/FS CHIP SELECT
DAREC [H]	DELAYED AUDIO RECORDING Ⓗ
DATA	DATA
DECODER [L]	DECODER (L)
DECODER [R]	DECODER (R)
DEW	DEW
DEW SNS	DEW SENSOR
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓗ
E. REC 5V	EXCEPT RECORDING 5V
EC	ERROR TORQUE CONTROL
ECR	ERROR TORQUE CONTROL REFERENCE VOLTAGE
EDT TRIG [L]	EDIT TRIGGER Ⓛ
EDIT [H]	EDIT Ⓗ
EE [H]	EE Ⓗ
EE [H]/INS [M]	EE Ⓗ/INSERT Ⓜ
EE. VV. TR	EE/VV/TRICK PLAY
EJECT. PO	EJECT POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK
ENV. SEL	ENVELOPE SELECT
ENVE. OUT	ENVELOPE OUTPUT
ENVE. SEL	ENVELOPE SELECT
ENV SELECT	ENVELOPE SELECT
EP [H]	LP Ⓗ
EP/LP [H]	LP Ⓗ
EP/LP/SP	LP/SP
EP/SS [H]	LP/SLOW/STILL/STOP Ⓗ
EPROMCS	EPROM CHIP SELECT
EX. REC 5V	EXCEPT RECORDING 5V
FF/REW [L]	FIRST FORWARD/REWIND Ⓛ
FG1 IN	FG1 PULSE INPUT
FG2 IN	FG2 PULSE INPUT
FILTER ADJUSTMENT	FILTER ADJUSTMENT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓗ
FLY ON [H]	FLYING ERASE HEAD ON Ⓗ
FLY. E [H]	FLYING ERASE HEAD ON Ⓗ
FM MUT [H]	FM AUDIO MUTE Ⓗ
FM MUTE [H]	FM AUDIO MUTE Ⓗ
FM OUT [L]	FM OUTPUT (L)
FM OUT [R]	FM OUTPUT (R)
FM PACK OUT [L]	FM PACK OUTPUT (L)
FM PACK OUT [R]	FM PACK OUTPUT (R)
FM/BS SEL [L]	FM/BS SELECT (L)
FM/BS SEL [R]	FM/BS SELECT (R)
FS. CLK	FS CLOCK
FUL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E [H]	FULL ERASE HEAD ON Ⓗ

FULL. E. 12V	FULL ERASE 12V
GND [A]	GND (ANALOG)
GND [TU]	GND (TUNER)
GND/N. SW. 12V	GND/NON SW 12V
H. SYNC	HORIZONTAL SYNC
H. AMP. SW	HEAD AMP SW PULSE
H. P <R>	HEAD PHONE (R)
H. P <L>	HEAD PHONE (L)
H. P GND	HEAD PHONE GND
H. P OUT [L]	HEAD PHONE OUTPUT (L)
H. P OUT [R]	HEAD PHONE OUTPUT (R)
H. SW	HEAD SW PULSE
HEAD PHONE [L]	HEAD PHONE (L)
HEAD PHONE [R]	HEAD PHONE (R)
HEAD SW	HEAD SW
HEATER [+]	HEATER (+)
HEATER [–]	HEATER (–)
HSS	HORIZONTAL SYNC SIGNAL
HTR [+]	HEATER (+)
HTR [–]	HEATER (–)
I RFE	REFERENCE CURRENT
ICL	CONTROL AGC CIRCUIT
IF	INTERMEDIATE FREQUENCY
IN SELA1	INPUT SELECT A1 POSITION
IN SELA2	INPUT SELECT A2 POSITION
IN SELA3	INPUT SELECT A3 POSITION
INS L/R [L]	INSERT Lch/Rch Ⓛ
INS. [H]	INSERT Ⓗ
INSEL A1	INPUT SELECT A1 POSITION
INSEL A2	INPUT SELECT A2 POSITION
INSERT	INSERT
INSERT [H]	INSERT Ⓗ
IO CS	INPUT/OUTPUT CHIP SELECT
JOG1	JOG1
JOG S3 LED/FOWRD	JOG LED/FORWARD LED
JOG/F. LED	JOG LED/FORWARD LED
JSB [H]	JSB Ⓗ
JST. CLCK	JUST CLOCK
JST. CLK	JUST CLOCK
JST. CLOCK	JUST CLOCK
L. OUT	Lch OUTPUT
L. CH [H]	Lch Ⓗ
L. CH [L]	Lch Ⓛ
LED (MAIN)	LED (MAIN)
LED (STEREO)	LED (STEREO)
LED (SUB)	LED (SUB)
LED CKL	LED SERIAL CLOCK
LED CKS	LED SERIAL CLOCK
LED DATA	LED SERIAL DATA
LINE IN 1 [L]	LINE INPUT 1 (L)
LINE IN 1 [R]	LINE INPUT 1 (R)
LINE IN 2 [L]	LINE INPUT 2 (L)
LINE IN 2 [R]	LINE INPUT 2 (R)
LINE IN V	LINE INPUT VIDEO
LINE IN [L]	LINE INPUT (L)

LINE IN [R]	LINE INPUT (R)
LINE OUT [L]	LINE OUTPUT (L)
LINE OUT [R]	LINE OUTPUT (R)
LP [H]	LP Ⓗ
LPTRI [L]	LP TRICK PLAY Ⓛ
Lch/A. DUB	Lch/AUDIO DUBBING
M GND	MOTOR GND
M REG	MOTOR REGULATOR
MAIN OUT	MAIN OUTPUT
MAIN [L]	MAIN Ⓛ
MAIN/MONO	MAIN/MONAURAL
MAX IN	MAXIMAM INPUT
MES [H]	MESECAM Ⓗ
MESE [H]	MESECAM Ⓗ
MESE [L]	MESECAM Ⓛ
METER 5V	LEVEL METER 5V
METER [L]	LEVEL METER (L)
METER [R]	LEVEL METER (R)
METER. L/AVS	LEVEL METER (L)
METER. R/AVC	LEVEL METER (R)
MI/BI [L]	MIX Ⓗ/BILIGUAL
MIC GND	MIC GND
MIC IN	MIC INPUT
MIC IN [L]	MIC INPUT (L)
MIC IN [R]	MIC INPUT (R)
MIC [H]	MIC Ⓗ
MIX [H]	MIX Ⓗ
MIX [H]/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINE	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MN. H/M. L	MONAURAL Ⓗ/MAIN Ⓛ
MN. H/MAI. L	MONAURAL Ⓗ/MAIN Ⓛ
MN2/MES. L	MONAURAL 2/MESECAM Ⓛ
MODE SEL	AUDIO MODE SELECT
MODE SW	AUDIO MODE SW
MODE. S. IN	AUDIO MODE SELECT INPUT
MODE. S. OUT	AUDIO MODE SELECT OUTPUT
MONO [H]	MONAURAL Ⓗ
MONO [H]/MAIN [L]	MONAURAL Ⓗ/MAIN Ⓛ
MONO2 [L]	MONAURAL 2
MONO2/MESE [FM(L)]	MONAURAL 2/MESECAM (FM Ⓛ)
MOTOR GND	MOTOR GND
MUTE	MUTE
N. A. REC [L]	NORMAL AUDIO RECORDING
N. SW 12V	NON SW 12V
N. SW. 5. DET	NON SW 5V DETECT
NICAM	NICAM
NICAM [L]	NICAM Ⓛ
NOL [H]	PAL Ⓗ/4.43 NTSC Ⓜ/3.58 NTSC Ⓛ
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY Ⓗ
NORMAL [H]	NORMAL Ⓗ
NR BIAS	NR BIAS
NTSC [L]	NTSC Ⓛ
OCH	CONTROL AGC CIRCUIT
OUT	OUTPUT

P-OFF [H]	POWER OFF Ⓗ
P-OFF [L]	POWER OFF Ⓛ
P. FAIL	POWER FAILURE DETECT
P. OFF [H]	POWER OFF Ⓗ
P. OFF [L]	POWER OFF Ⓛ
PAL [H]	PAL Ⓗ
PAL [L]/NTSC [H]	PAL Ⓛ/NTSC Ⓗ
PB ADJ OUT	PLAYBACK ADJUST OUTPUT
PB OUT	PLAYBACK OUTPUT
PB. H	PLAYBACK Ⓗ
PFG	PG/FG
PHOTSN +B	PHOTO SENSOR +B
PICT. CNT	PICTURE CONTROL
PLAY LED/RVS LED	PLAY LED/REVERSE LED
PLAY. PO	PLAY POSITION
PLAY/R. LED	PLAY LED/REVERSE LED
PLY/DEW	PLAY/DEW Ⓗ
POWER OFF [L]	POWER OFF Ⓛ
PREROLL [H]	PREROLL Ⓗ
PWRFAIL	POWER FAILURE DETECT
R. CH [H]	Rch Ⓗ
R. CH [L]	Rch Ⓛ
R. ST	RESET
R/S/F	REVERSE Ⓗ/STOP Ⓜ/FORWARD Ⓛ
RCH [H]	Rch Ⓗ
REC 12V	RECORDING 12V
REC CHROMA	RECORDING CHROMINANCE SIGNAL
REC H	RECORDING Ⓗ
REC IN	RECORDING INPUT
REC OUT [L]	RECORDING OUTPUT Ⓛ
REC START	RECORDING START
REC VR [C]	RECORDING VOLUME (COMMON)
REC VR [L]	RECORDING VOLUME (L)
REC VR [R]	RECORDING VOLUME (R)
REC Y	RECORDING LUMINANCE SIGNAL
REC [H]	RECORDING Ⓗ
REC. C	RECORDING CHROMINANCE SIGNAL
REC. Y	RECORDING LUMINANCE SIGNAL
REC/EE CTL	RECORDING/EE CONTROL
REEL-T	REEL PULSE (TAKE-UP)
REEL-S	REEL PULSE (SUPPLY)
REGULATOR FILTER	REGULATOR FILTER
RESET	RESET
REV M F/R	REVIEW MOTOR FORWARD/REVERSE
REV M V1	REVIEW MOTOR V1
REV M V2	REVIEW MOTOR V2
REV MOTOR F/R	REVIEW MOTOR FORWARD/REVERSE
REV MOTOR V1	REVIEW MOTOR V1
REV MOTOR V2	REVIEW MOTOR V2
REV MOTOR [+]	REVIEW MOTOR (+)
REV MOTOR [–]	REVIEW MOTOR (+)
REV. M. GND	REVIEW MOTOR GND
RF. CHROMA	RF CHROMINANCE SIGNAL

RF OUT	RF OUTPUT
RF Y	RF LUMINANCE SIGNAL
RF. Y. IN	RF LUMINANCE SIGNAL INPUT
RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT
ROTAR. SW	ROTARY SW
ROTARY	ROTARY SW
RST	RESET
RST [L]	RESET Ⓛ
Rch/INST	Rch/INSERT
S IN	SERIAL DATA INPUT
S OUT	SERIAL DATA OUTPUT
S-PHOTO	SUPPLY PHOTO TRANSISTOR
S-RL. PLS	SUPPLY REEL PULSE
S. CLK	SERIAL CLOCK
S. CLK/AV	SERIAL CLOCK/AV
S. DATA	SERIAL DATA
S. DATA/A	SERIAL DATA
S. PHOTO	SUPPLY PHOTO TRANSISTOR
S. TAB [L]	SAFETY TAB SW ON Ⓛ
S/P/N	SECAM/PAL/NTSC
SC IN	SERIAL CLOCK INPUT
SC OUT	SERIAL CLOCK OUTPUT
SCK SELECT	SERIAL CLOCK SELECT
SEL OUT [L]	SELECT OUTPUT (L)
SEL OUT [R]	SELECT OUTPUT (R)
SHUTTLE 1	SHUTTLE 1
SIF	SOUND INTERMEDIATE FREQUENCY
SLMUT [H]	INPUT SELECT MUTE Ⓗ
SLNID [+]	SOLENOID (+)
SLNID [–]	SOLENOID (–)
SLW TR. MM	SLOW TRACKING MONO MULTI
SLW TR. REF	SLOW TRACKING REFERENCE VOLTAGE
SNS. GND	SENSOR GND
SOFT [H]	SOFT TAPE PLAY Ⓗ
SOFT [H]/NORMAL	SOFT TAPE PLAY Ⓗ/NORMAL Ⓗ
SOLENOID ON [L]	SOLENOID ON Ⓛ
SP [H]	SP Ⓗ
SP/L/SLP	SP/LP
SSS [L]	SLOW/STILL/STOP
STEREO LED	STEREO LED
STEREO [H]	STEREO Ⓗ
STEREO [L]	STEREO Ⓛ
STOP. PO	STOP POSITION
STOP/5V	STOP POSITION/5V
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT
STOP1/PAL:ST	STOP1 POSITION/PAL
STOP2. PO	STOP 2 POSITION
STOP2/S-TAB	STOP 2 POSITION/SAFETY TAB SW
STREO [H]	STEREO Ⓗ
SUB BIAS	SUB BIAS
SUB. SW	SUB SW
SVHS CAS [L]	S-VHS CASSETTE Ⓛ
SW. 5. DET	SW 5V DETECT
SYNC [L]	SYNC Ⓛ
SYSCON 5V	SYSTEM CONTROL 5V
SYSTEM	SYSTEM SW
T-PHOTO	TAKE-UP PHOTO TRANSISTOR
T-RL. PLS	TAKE-UP REEL PULSE
T. BUSCLK	TIMER BUS CLOCK
T. BUSLSN	TIMER BUS LISTEN
T. BUSTLK	TIMER BUS TALK
T. END [L]	TAPE END Ⓛ
T. PHOTO	TAKE-UP PHOTO TRANSISTOR
TAPE END [L]	TAPE END Ⓛ
TAPE END [L]/CAM	TAPE END Ⓛ/CAMERA PAUSE
TEST	TEST MODE
TPZ	TRAPEZOIDAL WAVE CIRCUIT
TRIC [L]	TRIC PLAY Ⓛ
TRICK [L]	TRIC PLAY Ⓛ
TRK. ENV	AUTO TRACKING ENVELOPE DETECT
TU. AUDIO	TUNER AUDIO
TU. GND	TUNER GND
TU. V. IN	TUNER VIDEO SIGNAL INPUT
TU. VIDEO	TUNER VIDEO
TUN NOR IN	TUNER NORMAL INPUT
TUN R	TUNER AUDIO (R)
TUN. AUDIO IN	TUNER AUDIO INPUT
TUNER 12V	TUNER 12V
TUNER L	TUNER AUDIO (L)
TUNER V IN	TUNER VIDEO SIGNAL INPUT
TUNER [L]	TUNER AUDIO (L)
TUNER [N]	TUNER AUDIO (NORMAL)
TUNER [R]	TUNER AUDIO (R)
TUNER. 12	TUNER 12V
TUOFF [H]	TUNER OFF Ⓗ
TV. AUDIO	TV AUDIO
TV/VTR	TV/VTR
TXTON [L]	TEXT ON Ⓛ
U. REG45V	UNREGULATOR 45V
UNREG	UNREGULATOR
UNREG19V	UNREGULATOR 19V
V. REF	REFERENCE VOLTAGE
V. EE [H]	VIDEO EE Ⓗ
V. EE [L]	VIDEO EE Ⓛ
VCO REF	REFERENCE OSCILLATER
VD. IN	VIDEO SIGNAL INPUT
VD. OUT	VIDEO SIGNAL OUTPUT
VIDEO EE [L]	VIDEO EE Ⓛ
VIDEO IN	VIDEO SIGNAL INPUT
VIDEO OUT	VIDEO SIGNAL OUTPUT
VM	MOTOR VOLTAGE
VM DOWN [L]	MOTOR VOLTAGE DOWN Ⓛ
VSS	VERTICAL SYNC SIGNAL
VTR [H]	VTR Ⓗ
VTR. 12V	VTR 12V
X IN	OSCILLATOR INPUT
X OUT	OSCILLATOR OUTPUT

For your safety please read the following text carefully

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5 amp fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS 1362.

Check for the ASTA mark or the BSI mark on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstance should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol ⏚.

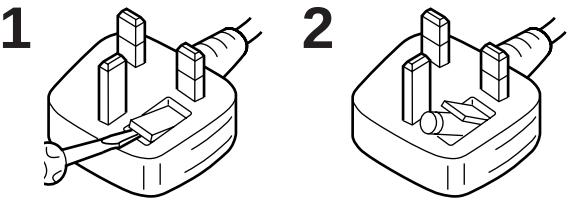
How to replace the Fuse

- There are two types of the AC Mains Lead assembly: **A** and **B** as shown below.

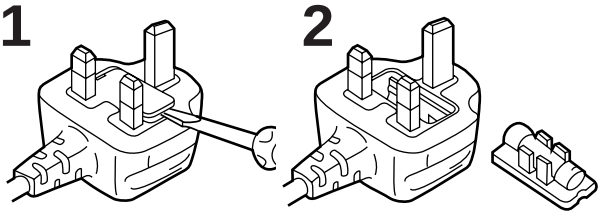
1 Open the fuse compartment with a screwdriver.

2 Replace the fuse and fuse cover.

TYPE A

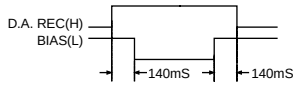


TYPE B



No.	NAME	I/O	Description	P-OFF	P-SAVE	P-FAIL	Reset
1	CURRENT_LIMIT	O	Current limit terminal for Capstan driver.	Low	Low	Low	Low
2	F ADJUST	O	Analogue voltage output for Head frequency response adjustment.	Low	Low	Low	Low
3	SCAS_IN(L)	I	Detection Terminal for VHS tape or S-VHS tape.	In	In	In	In
4	ADUB(H)	O	Switching terminal of BIAS OSC noise reduction filter in ADUB (1). The VCR mode is ADUB/ADUB-PS(Including Assemble/Synchro./AV Insert): High output (2). Other than above: Hi-Z output	Hi-Z	Hi-Z	Hi-Z	Hi-Z
5	TRACKING_ENVE	I	Video envelope input terminal for auto tracking and CVC.	In	In	In	In
6	SLP(H)	O	Tape speed output terminal.(EE/VV) *When the NTSC10/PAL9H is set up as the Servo data.: High (H) output. *Other than above speed : Low (L) output.	Low	Low	Low	Low
7	LP(H)	O	Tape speed output terminal.(EE/VV) *When the NTSC4H/6H or PAL6H/9H is set up as the Servo data : High (H) Output. *Other than above speed : Low (L) output. *As for 2 head model, the output signal is fixed to low, no matter if it has LP mode or not.	Low	Low	Low	Low
8	CPB	I	PB(H) input terminal from AV2. *From 3.85v to 5.0v : High *From 1.82v to 2.84v :Middle *From 0v to 0.81v :Low	In	In	In	In
9	AFC S	I	S curve input terminal from the Tuner.	In	In	In	In
10	A-MUTE(H)	O	Audio mute signal exclusive for the RF converter.	High	High	Low	High
11	AV1_8IN	I	PB(H) input terminal from AV1. *From 3.85v to 5.0v : High *From 1.82v to 2.84v :Middle *From 0v to 0.81v :Low	In	In	In	In
12	N/S/T2/T3	I	Normal/Service/Test2/Test3 select *Over than 4.0v :NORMAL mode *From 2.5v to 4.0v :SERVICE mode *From 1.0v to 2.5v :TEST2 mode *From 0v to 1.0v :TEST3 mode	In	In	In	In
13	S-PHOTO	I	Tape end sensor input from supply side. *More than 2.6V: Black / Less than 2.4V : white)	In	In	In	In
14	T-PHOTO	I	Tape beginning sensor input from take up side *More than 2.6V: Black / Less than 2.4V : white)	In	In	In	In
15	ABS_NORM(H)	I	Input terminal for FM audio envelope level detection.	In	In	In	In
16	S-VHS/MES/NOR	I	Input terminal for Playback detection result. (S-VHS/MESECAM/NORMAL)	In	In	In	In
17	S-VHS(H)	O	Output terminal for S-VHS mode.	Low	Low	Low	Low
18	SECAM_ID_IN(L)	I	Input terminal for SECAM detection result.	In	In	In	In
19	D.FM.REC(H)	O	Control signal for timing of FM audio recording current.	Low	Low	Low	Low
20	ART.V/H/N	O	Output terminal of the Artificial V synchronization signal.	Low	Low	Low	Low
21	AV1_OUT_SW(L)	I	Input terminal of composite/component switching for AV1 output. *It is automatically switched composite/component when this result is sent to TV using P50.	In	In	In	In
22	AV3_S_IN(L)	I	Input terminal of AV3_S-VHS input condition. *AV3_S-VHS IN : "Low" (L).	In	In	In	In
23	ET_REC(H)	O	REC Mode output terminal of the S-VHS-ET.	Low	Low	Low	Low
24	VIDEO.H.SW	O	Output terminal for video HEAD switching signal.	Low	Low	Low	Low
25	A.H.SW	O	Output terminal for FM audio HEAD switching signal.	Low	Low	Low	Low
26	A.DEF(H)	O	Output terminal for decoder IC Reset.	Low	Low	Low	Low
27	TBC MODE0	O	TBC MODE0 output.	Low	Low	Low	Low
28	AVPB-H(L)	O	Output terminal of PB (H/M) for AV2. (If the unit has only one scart terminal, this is for AV1.) *To be outputted signal from 21pin (8) has been changed to H/M/L signal in accordance with the following terminal's settings.	High	High	Low	High
29	AVPB-M(H)	O		Low	Low	Low	Low
30	GND(D)	I	GND	---	---	---	---
31	20MHz.IN	I	Main oscillator input	---	STOP	STOP	---
32	20MHz.OUT	O	Main oscillator output	---	STOP	STOP	---
33	+5V(D)	I	VDD	---	---	---	---
34	32KHz IN	I	Sub oscillator input	---	---	---	---
35	32KHz OUT	O	Sub oscillator output	---	---	---	---
36	VCONT	I	Open	---	---	---	---

pin8 \ Setting	AVPBH-(L)	AVPBM-(H)
High	L	Hi-Z
Middle	H	Hi-Z
Low	H	L

No.	NAME	I/O	Description	P-OFF	P-SAVE	P-FAIL	Reset
37	V EE(L)	O	Output terminal of EE and VV switching.	Low	Low	Low	Low
38	ILLUMI LED ON(H)	O	Front Illumination LED ON/OFF control terminal. * The output is decided according to ON/OFF setting of OSD menu and power ON/OFF condition of VCR. * During OSD menu is OFF: Low output * During OSD menu is ON: VCR power is ON: High output	Low	Low	Low	Low
39	D.A.REC(H)	O	Timing control terminal for linear audio recording current.	Low	Low	Low	Low
40	BIAS(L)	O	Bias oscillation control terminal for linear audio.	High	Hi-Z	Hi-Z	High
41	FM.MUTE(H)	O	Output terminal for audio mute control.	High	High	Low	High
42	FULL ERASE(L)	O	Full Erase Head oscillation control terminal.	Low	Low	Low	Low
43	POWER_KEY	I	Input terminal for power on/off command through power button. (The power on/off is switched by detecting falling edge of H to L.)	In	In	In	In
44	POS.SW3	I	Input terminal for mechanism position.  	In	In	In	In
45	POS.SW2	I		In	In	In	In
46	POS.SW1	I		In	In	In	In
47	POWER OFF(H)	O	Control signal for power circuit. *High is existed when turning off the power supply for concerned circuit. *Low is existed while power is supplied to mechanism and/or concerned circuit, although it seems to be power off.	High	High	Low	High
48	FIP(L)	O	Control terminal for FIP on/off. *Low is existed when FIP OFF is selected on the Menu screen and the VCR turns off.	Not fix	High	Low	Low
49	P50 IN	I	Interrupt serial input terminal for project 50.	In	In	In	In
50	LC.OSC IN	I	Oscillation output terminal for OSD dot clock.	---	---	---	---
51	LC.OSC OUT	O	Oscillation input terminal for OSD dot clock.	---	---	---	---
52	RESET(L)	I	Reset input terminal of microprocessor.	In	In	In	In
53	4FC.LPF	I	4FSC input terminal.	---	---	---	---
54	OSD.FSC IN	I	FSC input tewrminal.	---	---	---	---
55	5V(OSD)	I	Power supply terminal for OSD circuit.	---	---	---	---
56	CVIN	I	Input terminal for composite video signal.	---	---	---	---
57	GND(OSD)	I	GND terminal for composite video signal.	---	---	---	---
58	LECHA	I	Input terminal for white level of composite video signal.	---	---	---	---
59	20M.START(H)	I	Control terminal for high/low-speed mode.	---	---	---	---
60	MD0	I	Mode switching terminal for Overwriting the Flash memory.	---	---	---	---
61	CVOUT	O	Output terminal for CG video.	---	---	---	---
62	HLF	O	LPF connecting terminal of the Slicer for OSD dot clock.	---	---	---	---
63	VHOLD	O	Capacitor connecting terminal of the Slicer for OSD dot clock.	---	---	---	---
64	CVIN(EDS)	I	Input terminal of the composite video signal for the Slicer.	In	In	In	In
65	SHORT_DN	I	Emergency detection terminal of oscillating circuit for recording. *The power is turned off Compulsory when this input becomes high while BIAS(L) existing (The self test indication displays : F08). *The power is turned off Compulsory when this input becomes Low while BIAS(H) existing (The self test indication displays : F07).	In	In	In	In
66	UNLOADING(H)	O	Control terminal for Loading motor.(Forward) *High is existed when the loading motor rotates reverse direction and/or breaking.	Low	Low	Low	Low
67	LOADING(H)	O	Control terminal for Loading motor.(Reverse) *High is existed when the loading motor rotates forward direction and/or breaking.	Low	Low	Low	Low
68	PAL-I/BG/DK(SYS4)	O	Output terminal for broad cast system to control the video circuit.	Not fix	Low	Low	Low
69	SECAM/PAL(SYS2)	O	Output terminal for the unit recognition result of broad cast system.	Low	Low	Low	Low
70	ADD-V	I	V-sync. Input terminal.	In	In	In	In
71	OSD PULSE	O	Terminal for abstracting the BOX from Video signal in superimpose mode.	Low	Low	Low	Low
72	SLEEP(L)	O	Output terminal of control signal for super power save mode, to be supplied to power circuit. *Low is existed when the super power save ON is selected and the unit is in the P-OFF	High	Low	Low	High
73	PROG ON	O	I/O control to switch IIC bus for LW-programmer. H:IIC bus is connected to AV2. L:IIC bus is not connected to AV2.	Low	Low	Low	Low
74	NAVI(H)	O	NAVI data writing control signal in Vertical Branking Period.	Low	Low	Low	Low
75	NAVI DATA	O	NAVI data writing control signal in Vertical Branking Period.	Low	Low	Low	Low
76	P FAIL	I	Interrupt input terminal for power fail detection.	In	In	In	In
77	IR	I	Interrupt input terminal receiving from IR-Remote Controller.	In	In	In	In
78	P50 OUT	O	Data output terminal for Project 50 (Q-Link, etc.)	Not fix	Low	Low	Low
79	CAP.ET	O	Output terminal for Capstan Torque command.	0V	0V	Low	0V
80	CYL.ET	O	Output terminal for Cylinder Torque command.	4.213V	4.213V	Low	4.213V
81	B/W(H)	O	B/W mode output terminal.	Low	Low	Low	Low
82	HALF_WAVE(H)	O	Control terminal for switching capstan motor speed full-wave (First) and Half-wave mode.	In	In	In	In
83	CAP.R/F	O	Capstan motor rotation direction control terminal.	Low	Low	Low	Low
84	125Hz	O	Output terminal of the reference 125Hz clock using for clock adjustment.	Not fix	Low	Low	Low
85	FLD/S-BUS CS	O	FLD/Slicer bus chip select terminal.	Not fix	Low	Low	Low
86	FLD/S-BUS/T2 CLK	O	FLD / Slicer bus / Test 2 clock terminal.	Not fix	Low	Low	Low
87	FLD/S-BUS/T2 IN	I	FLD/Slicer bus / TEST2 Data output terminal.	Not fix	In	In	In
88	FLD/S-BUS/T2 OUT	O	FLD/Slicer bus / TEST2 Data in terminal	Not fix	Low	Low	Low
89	5P CLK	O	FIP driver / TEST2 Serial Clock terminal (Serial clock signal for FIP driver and factory machine)	Not fix	Low	Low	Low
90	5P DATA IN	I	FIP driver / TEST2 Serial data input terminal (Serial data input signal for FIP driver and factory machine)	Not fix	In	In	In
91	5P DATA OUT	O	FIP driver / TEST2 Serial data output terminal (Serial data output signal for FIP driver and factory machine)	Not fix	Low	Low	Low

No.	NAME	I/O	Description	P-OFF	P-SAVE	P-FAIL	Reset
92	S TAB_ON(L)	I	Input terminal of condition of the erasure prevention tab on the cassette tape. *With tab : "Low" / Without tab : "High".	In	In	In	In
93	T.REEL.PULSE	I	Input terminal for the pulse from Take-up Reel Sensor.	In	In	In	In
94	S.REEL.PULSE	I	Input terminal for the pulse from Supply Reel Sensor.	In	In	In	In
95	DAVN	I	DAVN signal from Slicer	In	In	In	In
96	EEP_WR	O	Write enable for EEPROM H:READ only L:Write	High	High	Low	High
97	MAIN IIC CLK	O	IIC clock for AV1CHIP,FM audio,Tuner,Decoder and RFC	Not fix	Low	Low	Low
98	MAIN IIC DATA	I/O	IIC data for AV1CHIP,FM audio,Tuner,Decoder and RFC	Not fix	Low	Low	Low
99	OSD IIC CLK	O	IIC clock for EEPROM,I/O and slicer	Not fix	Low	Low	Low
100	OSD IIC DATA	O	IIC data for EEPROM,I/O and slicer	Not fix	Low	Low	Low
101	EE(L)	O	Output terminal of EE and VV switching.	Low	Low	Low	Low
102	EX.FF/REW(L)	O	Control terminal for the filter of the PB-CTL signal during FF/REW.	Low	Low	Low	Low
103	FG.AMP.OUT	O	Output from internal FG Amplifier	---	---	---	---
104	FG.AMP.IN	I	Input for internal FG Amplifier	---	---	---	---
105	GND(A)	I	GND.	---	---	---	---
106	to GND	I	GND.	---	---	---	---
107	PFG	I	FPG input terminal.	---	---	---	---
108	OREF	O	Output from internal reference voltage (2.5V)	---	---	---	---
109	IREF	I	Input for internal reference voltage	---	---	---	---
110	to GND	I	GND	---	---	---	---
111	CTL.HEAD(-)	I	Input signal from CTL HEAD(+)	---	---	---	---
112	CTL.HEAD(+)	I	Input signal from CTL HEAD(-)	---	---	---	---
113	CTL.AMP.REF	I	Input for internal CTL amplifier reference voltage	---	---	---	---
114	PB.CTL.OUT	O	Output from internal CLT amplifier	---	---	---	---
115	+5V(A)	I	VDD for Analogue signal process.	---	---	---	---
116	+5V(AD)	I	VDD for A/D converter.	---	---	---	---

INPUT CONDITION							VIDEO OUTPUT RESULT							AUDIO OUTPUT RESULT				
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	VCR IN	VCR OUT	AV1 Out	AV2 Out	RF (C)	AV1 Out Selector	AV2 Out Selector
OFF	---	---	---	---	---	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
VPS STAND BY or Personal Planner Standby	EXT or TIMER1 or TIMER2	---	---	L	NO.TU	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					C+.TU	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					AV1	L	AV2 In	AV1 In	L	L	OFF	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					AV2	L	AV2 In	AV1 In	L	L	OFF	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					AV3	L	AV2 In	AV1 In	L	L	OFF	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					SAT.NO	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					SAT.C+	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
				H	NO.TU	L	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
					C+.TU	L	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
					AV1	L	VCR out	AV1 In	H	H	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In
					AV2	L	VCR out	AV1 In	H	H	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	H	H	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
					SAT.C+	L	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
	DECODER	---	---	L	NO.TU	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					C+.TU	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					AV1	L	AV2 In	AV1 In	L	L	OFF	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					AV2	L	AV2 In	AV1 In	L	L	OFF	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					AV3	L	AV2 In	AV1 In	L	L	OFF	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					SAT.NO	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					SAT.C+	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
				H	NO.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
					C+.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
					AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
					SAT.C+	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In

INPUT CONDITION							VIDEO OUTPUT RESULT							AUDIO OUTPUT RESULT				
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	VCR IN	VCR OUT	AV1 Out	AV2 Out	RF (C)	AV1 Out Selector	AV2 Out Selector
P.ON	EXT	TV	EE	L	NO.TU	---	VCR out	VCR out	L	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					C+.TU	---	VCR out	VCR out	L	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
	or				AV1	---	VCR out	VCR out	L	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL
					AV2	---	VCR out	VCR out	L	L	ON	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
	TIMER1				AV3	---	VCR out	VCR out	L	L	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL
					SAT.NO	---	VCR out	VCR out	L	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
	or				SAT.C+	---	VCR out	VCR out	L	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
				H	NO.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
	TIMER2				C+.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					AV1	---	VCR out	VCR out	H	H	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL
					AV2	---	VCR out	VCR out	H	H	OFF	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
					AV3	---	VCR out	VCR out	H	H	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL
					SAT.NO	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
					SAT.C+	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
		VTR	EE	L	NO.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					C+.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					AV1	---	VCR out	VCR out	H	H	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL
					AV2	L	VCR out	VCR out	H	H	ON	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
						M/H	VCR out	VCR out	M/H	M/H	ON	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
					AV3	---	VCR out	VCR out	H	H	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL
					SAT.NO	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
					SAT.C+	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
				H	NO.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					C+.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
P.ON	EXT	VTR	EE	H	AV1	---	VCR out	VCR out	H	H	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL
					AV2	---	VCR out	VCR out	H	H	OFF	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
					AV3	---	VCR out	VCR out	H	H	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL
					SAT.NO	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
					SAT.C+	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
			VV	---	NO.TU	---	VCR out	VCR out	M/H	M/H	OFF	TUN	PB	PB	PB	PB	TUN	INSEL
					C+.TU	---	VCR out	VCR out	M/H	M/H	OFF	TUN	PB	PB	PB	PB	TUN	INSEL
					AV1	---	VCR out	VCR out	M/H	M/H	OFF	AV1	PB	PB	PB	PB	AV1 In	INSEL
					AV2	---	VCR out	VCR out	M/H	M/H	OFF	AV2	PB	PB	PB	PB	AV2 In	INSEL
					AV3	---	VCR out	VCR out	M/H	M/H	OFF	AV3	PB	PB	PB	PB	AV3 In	INSEL
					SAT.NO	---	VCR out	VCR out	M/H	M/H	OFF	SAT	PB	PB	PB	PB	SAT	INSEL
					SAT.C+	---	VCR out	VCR out	M/H	M/H	OFF	SAT	PB	PB	PB	PB	SAT	INSEL
	DECODER	TV	EE	L	NO.TU	L	VCR out	AV1 In	L	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	TUN	AV2 In	AV1 In
					C+.TU	L	VCR out	TUN IN	L	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN
						M/H	VCR out	TUN IN	L	L	OFF	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN
					AV1	L	VCR out	AV1 In	L	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	L	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	L	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	AV3	AV3	AV2 In	AV1 In	AV3 In	AV2 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	L	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	SAT	SAT	AV2 In	AV1 In	SAT	AV2 In	AV1 In
					SAT.C+	L	VCR out	SAT IN	L	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	TUN
						M/H	VCR out	SAT IN	L	L	OFF	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	TUN
				H	NO.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
					C+.TU	L	VCR out	TUN IN	H	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN
						M/H	VCR out	TUN IN	H	L	OFF	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN
					AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
					SAT.C+	L	VCR out	SAT IN	H	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	SAT
						M/H	VCR out	SAT IN	H	L	ON	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	SAT

INPUT CONDITION							VIDEO OUTPUT RESULT							AUDIO OUTPUT RESULT				
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	VCR IN	VCR OUT	AV1 Out	AV2 Out	RF (C)	AV1 Out Selector	AV2 Out Selector
P.ON	DECODER	VTR	EE	L	NO.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
					C+.TU	L	VCR out	TUN IN	H	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN
						M/H	VCR out	TUN IN	M/H	L	ON	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN
					AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
					SAT.C+	L	VCR out	SAT IN	H	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	SAT
						M/H	VCR out	SAT IN	M/H	L	ON	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	SAT
				H	NO.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
					C+.TU	L	VCR out	TUN IN	H	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN
						M/H	VCR out	TUN IN	H	L	OFF	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN
					AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
					SAT.C+	L	VCR out	SAT IN	H	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	SAT
						M/H	VCR out	SAT IN	H	L	OFF	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	SAT
			VV	---	NO.TU	L	VCR out	AV1 In	M/H	L	OFF	TUN	PB	PB	AV1 In	PB	TUN	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	TUN	PB	PB	AV1 In	PB	TUN	AV1 In
					C+.TU	L	VCR out	TUN IN	M/H	L	OFF	TUN	PB	PB	TUN	PB	TUN	TUN
						M/H	VCR out	TUN IN	M/H	L	OFF	AV2	PB	PB	TUN	PB	AV2 In	TUN
					AV1	L	VCR out	AV1 In	M/H	L	OFF	AV1	PB	PB	AV1 In	PB	AV1 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	AV2	PB	PB	AV1 In	PB	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	M/H	L	OFF	AV2	PB	PB	AV1 In	PB	AV2 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	AV2	PB	PB	AV1 In	PB	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	M/H	L	OFF	AV3	PB	PB	AV1 In	PB	AV3 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	AV3	PB	PB	AV1 In	PB	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	M/H	L	OFF	SAT	PB	PB	AV1 In	PB	SAT	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	SAT	PB	PB	AV1 In	PB	SAT	AV1 In
					SAT.C+	L	VCR out	SAT IN	M/H	L	OFF	SAT	PB	PB	SAT	PB	SAT	SAT
						M/H	VCR out	SAT IN	M/H	L	OFF	AV2	PB	PB	SAT	PB	AV2 In	SAT

NOTE: NO.TU: Tuner position, DECODER OFF (e.g. ARD) RGB SW : OFF = HIGH, ON=LOW

C+TU: Tuner position, DECODER ON (e.g. PREMI) EE : Non-Playback signal VV:Playback signal

***[M/H] :In case of Personal Planner standby(not External Link), AV1 PB must not output 'M' or 'H'**

INPUT CONDITION						VIDEO OUTPUT RESULT							AUDIO OUTPUT RESULT				
POWER	AV2 SELECT	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	VCR IN	VCR OUT	AV1 Out	AV2 Out	RF (C)	AV1 Out Selector	AV2 Out Selector
OFF	---	---	---	---	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
PDC STAND BY or TIMER1 or Personal Planner Standby	EXT or TIMER2	---	L	TUN	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	*[M/H]	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
				AV1	L	AV2 In	AV1 In	L	L	OFF	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In
				AV2	L	AV2 In	AV1 In	L	L	OFF	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
				AV3	L	AV2 In	AV1 In	L	L	OFF	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
				SAT.TU	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	*[M/H]	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
			H	TUN	L	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
					M/H	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
				AV1	L	VCR out	AV1 In	H	H	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In
					M/H	VCR out	AV1 In	H	H	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In
				AV2	L	VCR out	AV1 In	H	H	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
					M/H	VCR out	AV1 In	H	H	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
				AV3	L	VCR out	AV1 In	H	H	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
					M/H	VCR out	AV1 In	H	H	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
				SAT.TU	L	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
					M/H	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
	DECODER	---	L	TUN	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
				AV1	L	AV2 In	AV1 In	L	L	OFF	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
				AV2	L	AV2 In	AV1 In	L	L	OFF	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
				AV3	L	AV2 In	AV1 In	L	L	OFF	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	M/H	L	ON	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
				SAT.TU	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	M/H	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
			H	TUN	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
				AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
				AV2	L	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
				AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
				SAT.TU	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In

INPUT CONDITION						VIDEO OUTPUT RESULT							AUDIO OUTPUT RESULT				
POWER	AV2 SELECT	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	VCR IN	VCR OUT	AV1 Out	AV2 Out	RF (C)	AV1 Out Selector	AV2 Out Selector
P.ON	EXT	EE	L	TUN	---	VCR out	VCR out	L	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
				AV1	---	VCR out	VCR out	L	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL
	or			AV2	---	VCR out	VCR out	L	L	ON	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
				AV3	---	VCR out	VCR out	L	L	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL
	TIMER1			SAT.TU	---	VCR out	VCR out	L	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
			H	TUN	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
	or			AV1	---	VCR out	VCR out	H	H	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL
				AV2	---	VCR out	VCR out	H	H	OFF	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
	TIMER2			AV3	---	VCR out	VCR out	H	H	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL
				SAT.TU	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
		VV	---	TUN	---	VCR out	VCR out	M/H	M/H	OFF	TUN	PB	PB	PB	PB	TUN	INSEL
				AV1	---	VCR out	VCR out	M/H	M/H	OFF	AV1	PB	PB	PB	PB	AV1 In	INSEL
				AV2	---	VCR out	VCR out	M/H	M/H	OFF	AV2	PB	PB	PB	PB	AV2 In	INSEL
				AV3	---	VCR out	VCR out	M/H	M/H	OFF	AV3	PB	PB	PB	PB	AV3 In	INSEL
				SAT.TU	---	VCR out	VCR out	M/H	M/H	OFF	SAT	PB	PB	PB	PB	SAT	INSEL
	DECODER	EE	L	TUN	L	VCR out	TUN IN	L	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN
					M/H	VCR out	TUN IN	L	L	ON	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN
				AV1	L	VCR out	AV1 In	L	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In
					M/H	VCR out	AV1 In	L	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
				AV2	L	VCR out	AV1 In	L	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					M/H	VCR out	AV1 In	L	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
				AV3	L	VCR out	AV1 In	L	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
					M/H	VCR out	AV1 In	L	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
				SAT.TU	L	VCR out	SAT IN	L	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	SAT
					M/H	VCR out	SAT IN	L	L	ON	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	SAT
			H	TUN	L	VCR out	TUN IN	H	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN
					M/H	VCR out	TUN IN	H	L	OFF	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN
				AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
				AV2	L	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
				AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
				SAT.TU	L	VCR out	SAT IN	H	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	SAT
					M/H	VCR out	SAT IN	H	L	ON	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	SAT
		VV	---	TUN	L	VCR out	TUN IN	M/H	L	OFF	TUN	PB	PB	TUN	PB	TUN	TUN
					M/H	VCR out	TUN IN	M/H	L	OFF	AV2	PB	PB	TUN	PB	AV2 In	TUN
				AV1	L	VCR out	AV1 In	M/H	L	OFF	AV1	PB	PB	AV1 In	PB	AV1 In	AV1 In
					M/H	VCR out	AV1 In	M/H	L	OFF	AV2	PB	PB	AV1 In	PB	AV2 In	AV1 In
				AV2	L	VCR out	AV1 In	M/H	L	OFF	AV2	PB	PB	AV1 In	PB	AV2 In	AV1 In
					M/H	VCR out	AV1 In	M/H	L	OFF	AV2	PB	PB	AV1 In	PB	AV2 In	AV1 In
				AV3	L	VCR out	AV1 In	M/H	L	OFF	AV3	PB	PB	AV1 In	PB	AV3 In	AV1 In
					M/H	VCR out	AV1 In	M/H	L	OFF	AV3	PB	PB	AV1 In	PB	AV3 In	AV1 In
				SAT.TU	L	VCR out	SAT IN	M/H	L	OFF	SAT	PB	PB	SAT	PB	SAT	SAT
					M/H	VCR out	SAT IN	M/H	L	OFF	AV2	PB	PB	SAT	PB	AV2 In	SAT

NOTE: RGB SW : OFF = HIGH, ON=LOW

EE : Non-Playback signal VV:Playback signal

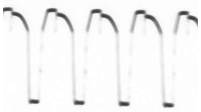
***[M/H] :In case of Personal Planner standby(not External Link), AV1 PB must not output 'M' or 'H'**

T1101-3 STOP
3.8Vp-p (2msec.div.)

T1101-5 STOP
500Vp-p (5usec.div.)

T1101-6 STOP
540Vp-p (5usec.div.)

T1101-7 STOP
30Vp-p (5usec.div.)



T1101-10 STOP
180Vp-p (5usec.div.)

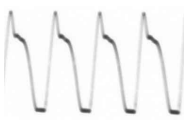
T1101-11 STOP
22Vp-p (5usec.div.)

T1101-13 STOP
50Vp-p (5usec.div.)

T1101-16 STOP
94Vp-p (5usec.div.)

T1101-17 STOP
23Vp-p (5usec.div.)

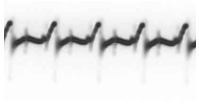
Q1101-S STOP
500Vp-p (5usec.div.)



Q1101-G STOP
170Vp-p (5usec.div.)

Q1101-D STOP
540Vp-p (5usec.div.)

Q1102-1 STOP
15Vp-p (5usec.div.)

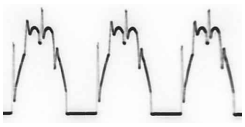


Q1102-2 STOP
1.0Vp-p (5usec.div.)

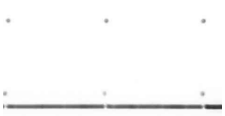
Q1102-3 STOP
500Vp-p (5usec.div.)

Q1201-1 STOP
0.5Vp-p (5usec.div.)

Q1201-2 STOP
0.5Vp-p (5usec.div.)



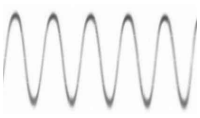
IC2501-1,18,20 PLAY
8.6Vp-p (2msec.div.)



IC6001-20 STILL
5.0Vp-p (5msec.div.)

IC6001-24 REC
5.0Vp-p (10msec.div.)

IC6001-34 REC
4.0Vp-p (5msec.div.)

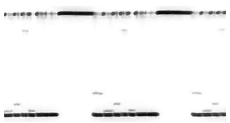


IC6001-35 REC
2.4Vp-p (20usec.div.)

IC6001-61 REC
2.0Vp-p (20usec.div.)

IC6001-93,94 FF/REW
5.0Vp-p (1msec.div.)

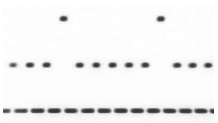
IC6001-97 REC
5.0Vp-p (5msec.div.)



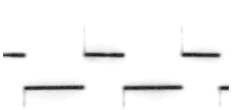
IC6001-98 REC
5.0Vp-p (5msec.div.)

IC6001-99 REC
5.0Vp-p (10msec.div.)

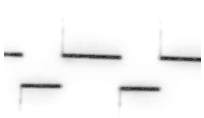
IC6001-100 REC
5.0Vp-p (10msec.div.)



IC6001-107 REC
5.0Vp-p (10msec.div.)

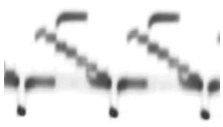


IC6001-111 REC
6.4Vp-p (10msec.div.)



IC6001-112 REC
6.4Vp-p (10msec.div.)

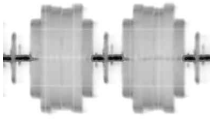
IC6001-114 PLAY
4.0Vp-p (10msec.div.)



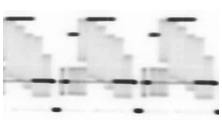
IC3001-11 REC
0.4Vp-p (20usec.div.)

IC3001-11 PLAY
0.4Vp-p (20usec.div.)

IC3001-13 REC/PLAY
0.4Vp-p (20usec.div.)

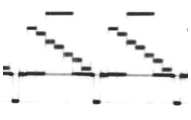


IC3001-20 REC
0.8Vp-p (20usec.div.)

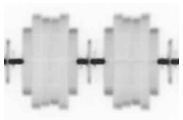


IC3001-22 REC
1.0Vp-p (20usec.div.)

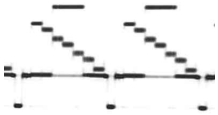
IC3001-45,46 REC/PLAY
5.0Vp-p (5msec.div.)



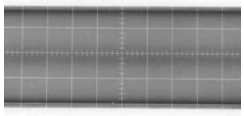
IC3001-57 REC/PLAY
2.0Vp-p (20usec.div.)



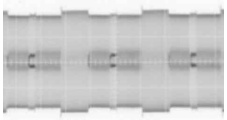
IC3001-59 REC/PLAY
1.5Vp-p (20usec.div.)



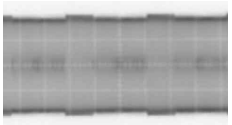
IC3001-68 REC
1.2Vp-p (20usec.div.)



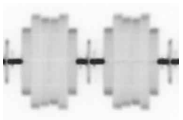
IC3001-84 PLAY
2.8Vp-p (20usec.div.)



IC3001-85 REC
3.0Vp-p (20usec.div.)



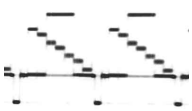
IC3001-86 PLAY
2.8Vp-p (20usec.div.)



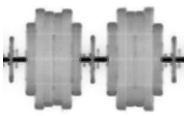
PP3001-2 PLAY
1.5Vp-p (20usec.div.)

PP3001-4 REC
5.0Vp-p (10msec.div.)

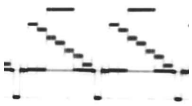
PP3001-6 REC
0.6Vp-p (20usec.div.)



PP3001-6 PLAY
0.6Vp-p (20usec.div.)



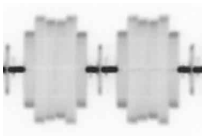
PP3001-10 REC
0.8Vp-p (20usec.div.)



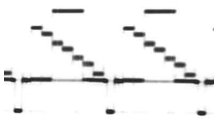
PP3001-12 REC
1.4Vp-p (20usec.div.)

PP3001-17 REC/PLAY
5.0Vp-p (20usec.div.)

PP3001-18 REC/PLAY
5.0Vp-p (20usec.div.)



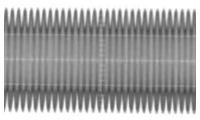
PP3002-2 PLAY
0.4Vp-p (20usec.div.)



PP3002-4 PLAY
1.8Vp-p (20usec.div.)

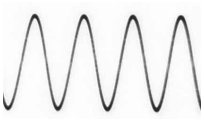
Q4002-C REC
8.4Vp-p (5usec.div.)

Q4006-C REC
8.4Vp-p (5usec.div.)



IC4501-21,22,24
REC 1.2Vp-p (10usec.div.)

IC4501-32 REC/PLAY
0.2Vp-p (0.5msec.div.)



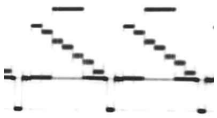
IC4501-53,57 REC/PLAY
1.2Vp-p (0.5msec.div.)

IC3301-48 REC/PLAY
5.0Vp-p (10msec.div.)

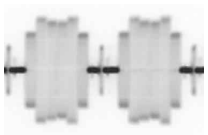
IC3301-75 REC/PLAY
5.0Vp-p (5msec.div.)

IC3301-76 REC/PLAY
5.0Vp-p (5msec.div.)

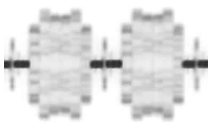
IC3301-81 REC
0.7Vp-p (20usec.div.)



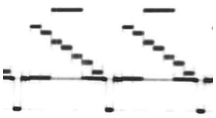
IC3301-83 PLAY
0.7Vp-p (20usec.div.)



IC3301-88 PLAY
0.4Vp-p (20usec.div.)



IC3301-93 REC/PLAY
0.4Vp-p (20usec.div.)



IC3301-95 PLAY
1.0Vp-p (20usec.div.)

SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

Ref. No.	IC1501								IC1502											
MODE	1	2	3	4					1	2	3	4								
STOP	1.1	2.3	0.0	0.0					0.0	1.1	0.1	0.0								
PLAY	1.1	2.3	5.0	0.0					0.0	1.1	5.0	0.0								
REC	1.2	2.3	5.0	0.0					0.0	1.1	5.0	0.0								
F.F	1.2	2.3	2.4	0.0					0.0	1.1	2.4	0.0								
REW	1.2	2.3	2.4	0.0					0.0	1.1	2.4	0.0								

Ref. No.	IC2501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.7	0.0	5.1	0.0	5.1	1.2	1.1	2.7	0.0	0.0	0.0	1.8	0.2	1.6	4.3	0.7	15.5	0.7	0.0	0.7
PLAY	3.7	0.0	5.1	1.0	5.1	1.2	1.1	2.5	0.0	0.0	1.0	2.6	0.3	1.8	1.8	3.7	15.5	3.7	0.0	3.7
REC	3.8	0.0	5.1	1.0	5.1	1.2	1.2	2.5	0.0	0.0	1.0	2.6	0.3	1.8	1.8	3.7	15.5	3.8	0.0	3.8
F.F	3.6	0.0	5.1	1.0	5.1	1.2	1.1	2.5	0.0	0.0	1.1	2.6	0.4	1.8	1.8	3.7	15.5	3.7	0.0	3.6
REW	3.8	0.0	5.1	1.0	5.1	1.2	1.1	2.5	0.0	0.0	1.0	2.6	0.3	1.8	1.8	3.8	15.5	3.7	0.0	3.8

Ref. No.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	5.0	4.9	4.9	4.2	0.1	4.7	0.0	0.0	0.0
PLAY	4.8	1.4	0.0	0.0	1.7	0.0	0.0	0.0	2.5	0.0	4.3	5.1	4.9	4.8	0.1	4.1	4.8	0.0	0.0	0.0
REC	4.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	5.1	4.9	4.7	4.2	0.1	4.8	0.0	4.8	0.0
F.F	5.1	1.4	0.0	0.0	0.1	0.0	0.0	0.0	2.4	0.0	0.0	5.1	4.9	4.9	4.2	0.1	4.8	0.0	0.0	0.0
REW	5.1	1.4	0.0	0.0	0.1	0.0	0.0	0.0	2.4	0.0	0.0	5.1	4.8	5.0	4.3	0.1	4.8	0.0	0.0	0.0

Ref. No.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	5.0	4.2	0.0	0.0	0.0	4.5	3.5	4.8	0.0	0.0	-	-	4.9	1.0	1.5	3.0	0.0	0.0	0.0	4.8
PLAY	5.0	4.2	0.0	2.4	2.4	4.5	3.5	0.0	0.0	0.0	-	-	4.9	0.8	1.5	3.0	4.8	0.0	0.0	4.9
REC	5.0	4.2	0.0	2.4	0.0	4.5	3.5	4.8	0.0	0.0	-	-	4.9	0.8	1.5	3.0	0.0	0.0	4.8	0.0
F.F	5.0	4.2	0.0	2.4	0.0	4.5	3.5	4.8	0.0	0.0	-	-	4.9	0.9	1.5	3.1	0.0	0.0	0.0	4.9
REW	5.0	4.2	0.0	2.4	0.0	4.5	3.5	4.8	0.0	0.0	-	-	4.9	0.9	1.5	3.0	0.0	0.0	0.0	4.9

Ref. No.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0.0	0.0	5.0	0.0	4.8	4.8	0.0	0.0	5.0	4.7	4.7	4.8	1.4	2.1	5.0	2.2	0.0	2.5	4.8	0.0
PLAY	0.0	0.0	5.0	4.8	0.0	0.0	0.0	0.0	5.0	4.7	4.7	4.9	1.4	2.1	5.0	1.9	0.0	2.5	4.9	0.0
REC	0.0	4.8	5.0	4.8	0.0	0.0	0.0	0.0	5.0	4.7	4.7	4.8	0.0	3.4	5.0	2.2	0.0	2.5	4.8	0.0
F.F	0.0	0.0	5.0	4.8	4.8	0.0	0.0	0.0	5.0	4.7	4.7	4.9	1.4	2.1	5.0	2.2	0.0	2.5	4.9	0.0
REW	0.0	0.0	5.0	4.8	4.9	0.0	0.0	0.0	5.0	4.7	4.7	4.9	1.4	2.1	5.0	2.2	0.0	2.5	4.9	0.0

Ref. No.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	1.9	1.9	1.0	2.0	0.3	0.0	0.0	0.0	4.9	0.1	0.0	4.8	0.0	0.0	0.0	5.2	5.2	0.0	0.0	2.7
PLAY	1.8	1.9	1.0	1.6	0.3	0.0	0.0	0.0	4.9	0.1	0.0	4.8	0.0	0.0	0.0	5.2	5.2	0.0	2.5	2.5
REC	1.9	1.9	1.0	2.0	4.5	0.0	0.0	0.0	4.8	0.1	0.0	4.8	0.0	0.0	0.0	5.2	5.2	0.0	2.4	2.5
F.F	1.9	1.9	1.0	2.0	0.3	0.0	0.0	0.0	4.9	0.1	0.0	4.8	0.0	0.0	0.0	5.2	5.2	0.0	2.9	2.5
REW	1.9	1.9	1.0	2.0	0.3	0.0	0.0	0.0	4.9	0.1	0.1	4.8	0.0	0.0	0.0	5.2	5.2	0.0	2.9	2.5

Ref. No.	IC6001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	4.9	0.0	0.0	0.0	4.9	5.2	5.2	5.2	5.2	0.0	0.0	0.0	0.1	0.1	5.0	4.9	0.0	0.0	5.0	5.0
PLAY	4.8	0.4	0.0	0.0	2.4	4.9	4.9	4.9	5.2	0.0	0.0	0.0	5.0	5.0	5.0	4.9	2.7	2.4	4.9	4.9
REC	4.8	0.4	0.0	0.0	2.4	4.9	4.9	4.9	5.2	5.2	5.2	0.0	4.9	4.8	5.0	4.8	2.7	2.4	4.9	4.9
F.F	4.8	4.8	0.0	0.0	2.4	4.9	4.9	4.9	5.2	5.2	5.2	0.0	2.4	2.3	5.1	4.8	2.7	2.5	5.0	5.0
REW	4.8	4.8	4.8	0.0	2.4	4.9	4.9	4.9	5.2	5.2	5.2	0.0	2.3	2.4	5.1	4.9	2.7	2.5	5.0	5.0

Ref. No.	IC6001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116				
STOP	0.0	0.0	2.5	2.5	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	2.5	2.5	5.1	5.1				
PLAY	0.0	0.0	2.5	2.5	0.0	0.0	1.0	2.5	2.5	0.0	2.5	2.5	2.5	2.5	5.1	5.1				
REC	0.0	0.0	2.5	2.5	0.0	0.0	1.0	2.5	2.5	0.0	1.9	2.3	2.5	2.5	5.1	5.1				
F.F	0.0	1.6	2.5	2.5	0.0	0.0	1.0	2.5	2.5	0.0	2.5	2.5	2.6	2.6	5.1	5.1				
REW	0.0	1.6	2.5	2.5	0.0	0.0	1.0	2.5	2.5	0.0	2.5	2.5	2.6	2.6	5.1	5.1				

Ref. No.	IC6002										IC6004									
MODE	1	2	3	4	5	6	7	8			1	2	3	4	5	6				
STOP	0.0	0.0	0.0	0.0	4.9	4.9	4.8	5.0			0.0	2.2	5.0	2.8	0.0	3.0				
PLAY	0.0	0.0	0.0	0.0	4.9	5.0	4.9	5.0			4.8	1.9	5.0	2.6	0.0	2.8				
REC	0.0	0.0	0.0	0.0	4.9	4.9	4.8	5.0			0.0	2.2	5.0	2.8	0.0	3.0				
F.F	0.0	0.0	0.0	0.0	5.0	5.0	4.9	5.0			0.0	2.2	5.0	2.8	0.0	3.0				
REW	0.0	0.0	0.0	0.0	5.0	5.0	4.8	5.1			0.0	2.2	5.0	2.8	0.0	3.0				

SYSTEM CONTROL & SERVO TRs DC VOLTAGE CHART (SP MODE)

Ref. No.	Q1501			Q1502			Q6001			Q6002			Q6005							
MODE	E	C		E	C		E	C	B	E	C	B	1	2	3	4	5	6		
STOP	4.7	0.0		4.9	0.0		1.6	5.0	2.2	2.5	1.9	0.0	5.0	0.0	0.0	0.5	0.0	0.0		
PLAY	4.8	0.0		5.0	0.0		1.3	5.0	1.9	2.5	0.0	1.8	5.0	0.0	0.0	0.5	0.0	0.0		
REC	4.7	0.0		4.9	0.0		1.6	5.0	2.2	2.5	0.0	1.9	5.0	0.0	0.0	0.5	0.0	0.0		
F.F	4.7	0.0		5.1	0.0		1.6	5.0	2.2	2.5	0.0	1.9	5.0	0.0	0.0	0.5	0.0	0.0		
REW	4.8	0.0		5.1	0.0		1.6	5.0	2.2	2.5	0.0	1.9	5.0	0.0	0.0	0.5	0.0	0.0		

Ref. No.	Q6007			Q6008			Q6010													
MODE	E	C	B	E	C	B	E	C	B											
STOP	0.0	4.4	0.0	-0.1	11.8	0.0	3.8	4.0	2.3											
PLAY	0.0	4.4	0.0	11.2	11.8	11.8	3.8	4.0	2.3											
REC	0.0	4.7	0.0	-0.1	11.8	0.0	3.8	4.0	2.3											
F.F	0.0	4.4	0.0	0.0	11.8	0.0	3.8	4.0	2.3											
REW	0.0	4.4	0.0	0.0	11.8	0.0	3.8	4.0	2.3											

Ref. No.	QR6001			QR6002					QR6004			QR6005								
MODE	E	C	B	1	2	3	4	5	E	C	B	E	C	B						
STOP	0.0	0.0	4.8	1.9	2.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	2.4	2.5						
PLAY	0.0	11.8	0.0	1.9	2.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	2.4	2.5						
REC	0.0	0.0	4.8	1.5	1.7	0.0	0.0	0.0	0.0	0.0	4.8	0.0	2.4	2.5						
F.F	0.0	0.0	4.8	0.2	0.4	0.0	0.0	0.0	0.0	0.0	4.8	0.0	2.4	2.5						
REW	0.0	0.0	4.8	1.3	0.7	0.0	0.0	0.0	0.0	0.0	4.8	0.0	2.4	2.5						

MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE

IC4501

JK4801 (AV3) FRONT
AUDIO IN (R)
AUDIO IN (L)
PS4801 PP3906 4
PS4801 PP3906 11
2
4

JK4902 (AV1) TV
1 AUDIO OUT (R)
2 AUDIO IN (R)
3 AUDIO OUT (L)
6 AUDIO IN (L)
TP4504
TP4503
TP4506
PS3902 PP3902 10
PS3902 PP3902 9
PS3902 PP3902 3
PS3902 PP3902 4
QR4504 MUTE
QR4504 MUTE
53
57
9
10

JK4903
AUDIO OUT (R)
AUDIO OUT (L)
TP4505
PS3902 PP3902 6
PS3902 PP3902 7
14
15

JK4901 (AV2) DECODER/EXT
1 AUDIO OUT (R)
2 AUDIO IN (R)
3 AUDIO OUT (L)
6 AUDIO IN (L)
PS3902 PP3902 12
PS3902 PP3902 13
QR4503 MUTE
QR4503 MUTE
51
52
SWITCH RCH
SWITCH LCH

TO TUNER
RFC AUDIO OUT
QR4507 MUTE
59

FROM DECODER
TUNER AUDIO (R)
TUNER AUDIO (L)
8
13

FROM DECODER/ TV DEMODU
TUNER AUDIO (N)
(B/EC/EE)
(EG)
Q7601 MUTE
61

TO/FROM AC HEAD
A.HEAD (W)
A.HEAD (R)
99
97

IC3001
MUTE
53
62
REC EQ
MUTE
VCA
R
P
92
61
MUTE CTL
78

OUTPUT SELECT SWITCH RCH
OUTPUT SELECT SWITCH LCH
NORMAL SELECT SWITCH

INPUT SELECT SWITCH RCH
INPUT SELECT SWITCH LCH
PNR RCH
PNR LCH

AGC & SWITCH
FM MODULATOR/ DEMODULATOR
LPF
BPF
BPF
LPF
AGC
AGC & SWITCH
FM MODULATOR/ DEMODULATOR

IIC BUS INTERFACE
42 MAIN IIC CLOCK
43 MAIN IIC DATA
TO/FROM SYSTEM CONTROL

VCO F0 45 FSC
FROM LUMINANCE & CHROMINANCE

27 AUDIO H.SW
FROM SYSTEM CONTROL

30 D.FM REC (L)
FROM SYSTEM CONTROL

PREAMP & SWITCH
29
24 P5001 8
21 P5001 9
22 P5001 10
L
R
Hi-Fi AUDIO HEAD

MUTE CTL 36 MUTE (L)
FROM SYSTEM CONTROL

NV-HS930EG/B/EC/EE
AUDIO BLOCK DIAGRAM

CAPSTAN MOTOR L0201

TL0201

IC0201 (CAPSTAN MOTOR DRIVE)

MOTOR DRIVE

DIFFERENTIAL AMPRIFIER

TORQUE CONTROL

TL AMP

EC AMP

POSITION SIGNAL PROCESS

TORQUE DIRECTION

CONTROL LOGIC

H1

H2

H3

LOADING MOTOR

P1501 1

P1501 2

P2501 P0201 9

P2501 P0201 8

INPUT		OUTPUT		MODE
PIN 15	PIN 16	PIN 19	PIN 21	
H	L	H	L	FORWARD
L	H	L	H	REWIND
H	H	L	L	BRAKE
L	L	OPEN	OPEN	STOP

R0206 CAPSTAN FG HEAD

CAP FG5V

P0201 P2501 4

TW2015

TW2002

TL2503

TL2502

P0201 P2501 1

P0201 P2501 2

P0201 P2501 3

P0201 P2501 12

P0201 P2501 11

UNREG 14.5V

1 CURRENT LIMIT

79 CAPSTAN ERROR TORQUE

83 CAPSTAN REVERSE/ FORWARD

67 LOADING (H)

66 UNLOADING (H)

104 CAPSTAN FG IN

103 CAPSTAN FG OUT

114 CTL OUT

102 EX.FF/REW (L)

S1501 MODE SW

45 POSITION SW2

44 POSITION SW3

46 POSITION SW1

IC6001 (SYSTEM CONTROL/SERVO IC)

20MHz IN 31

20MHz OUT 32

32KHz IN 34

32KHz OUT 35

X6002

X6001

FIP (L) 48

IR 77

BACK UP 5V 33

RESET (L) 52

P.FAIL (L) 76

S.DATA IN 87

S.DATA OUT 88

S.CLOCK 86

FIP CS 85

POWER KEY 43

IC7503

IC7504

RESET

N.SW 5V

C7507

Q6010

QR6005

QR1003

IC4801

IR RECEIVER

PP3906 PS4801 2

DP7501

TIMER DISPLAY

F+ 1

F+ 2

F- 44

F- 45

39

33

23

5

Q1001 BUFFER

HEATER(+)

HEATER(-)

UNREG -29V

FROM POWER

QR1002

19 VEE

IC7501

36 SEG1

18 SEG18

11 GRID1

17 GRID7

P6001 2

P6001 5

P6001 7

P6001 3

P6001 1

TO/FROM OSD/CNR

1 SERIAL DATA

2 SERIAL CLOCK

3 CS

CYLINDER STATOR UNIT

P2901

6,7	VM	P2501-3,4
1	M2	P2501-9
9	M1	P2501-1
3	M3	P2501-7
5	GND	P2501-5
8	HE-	P2501-2
4	HE+	P2501-6
2	VH+	P2501-8

MAIN COIL 2

MAIN COIL 1

MAIN COIL 3

HALL IC

REG 5V

IC2501 (CYLINDER MOTOR DRIVE)

COM

MOTOR DRIVE

PG/FG

DIFFERENTIAL AMPLIFIER

SCHMIT

TORQUE CONTROL

UNREG 14.5V

107 CYL PFG

80 CYLINDER ERROR TORQUE

N.SW 5V

14 TAKE-UP PHOTO

13 SUPPLY PHOTO

93 SAFETY TAB (L)

REG 5V

Q1501 TAKE UP PHOTO SENSOR

D1501 SENSOR LED

Q1502 SUPPLY PHOTO SENSOR

S7507 SAFETY TAB SW

IC1501 (T-REEL SENSOR)

IC1502 (S-REEL SENSOR)

TL6013

TL6012

94 S-REEL PULSE

93 T-REEL PULSE

CTL HEAD

P4002 5

P4002 6

111 CTL HEAD(-)

112 CTL HEAD(+)

EJECT S4802

POWER S4803

3D DNR S4801

PS4801 PP3906 6

PS4801 PP3906 7

PS4801 PP3906 1

TBC S7516

INSERT S7510

A.DUB S7509

EXT LINK S7508

T.REC S7513

PAUSE S7515

REC S7501

CH DOWN S7502

PLAY S7512

STOP S7503

CH UP S7504

5 A2

6 A5

7 A4

NV-HS930EG/B/EC/EE

SYSTEM CONTROL & SERVO BLOCK DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

IC3901
(INPUT/OUTPUT SELECT)

TO/FROM SYSTEM CONTROL
OSD IIC DATA
OSD IIC CLOCK
PP3904 PS3904 7
PP3904 PS3904 8
1 DATA
2 CLOCK
IIC BUS INTERFACE

JK4904 S-VIDEO OUT
4 REAR C OUT
3 REAR Y OUT
TP3024
TP3021

JK4902 AV1(TV)
19 VIDEO/Y OUT
15 C OUT
20 VIDEO IN
S4901 NORMAL ↔ S-VHS

JK4903 VIDEO OUT
REAR VIDEO OUT
Q4902 Q4903 AMP

JK4901 AV2 (DECODER)
19 VIDEO OUT
15 C IN
20 VIDEO/Y IN

TUNER/ TV DEMODULATOR
6 RFC VIDEO OUT
24 TUNER VIDEO
PP3902 PS3902 1
PP3904 PS3904 5

JK4801 AV3 VIDEO IN
FRONT VIDEO IN
PS4801 PP3906 9

JK4802 AV3 S-VIDEO IN
4 FRONT C IN
3 FRONT Y IN
PS4801 PP3906 12
PS4801 PP3906 14

TP3002
TP3003
TP3022
TP3023

CON Y OUT 31
CPS OUT 29
CPN C OUT 30
V IN2 36 CLAMP
V OUT AV1 33
V OUT AV2 34
CPN Y IN1 38 CLAMP
V IN3 40 CLAMP
CPN C IN1 42
V IN1 23 CLAMP

CPN C IN2 25
CPN Y IN2 27 CLAMP
CPN Y IN1 10 CLAMP
CPN C IN1 8
CPN C IN3 4
CPN Y IN3 6 CLAMP
CON Y IN2 20 CLAMP
CON C IN2 18
V IN4 16 CLAMP
CPS OUT 14
CON C OUT 12

L3903 C3904 B.P.F
L3902 C3901 C3902 C3903 L.P.F.
Q3901 BUFFER
Q3010 AMP

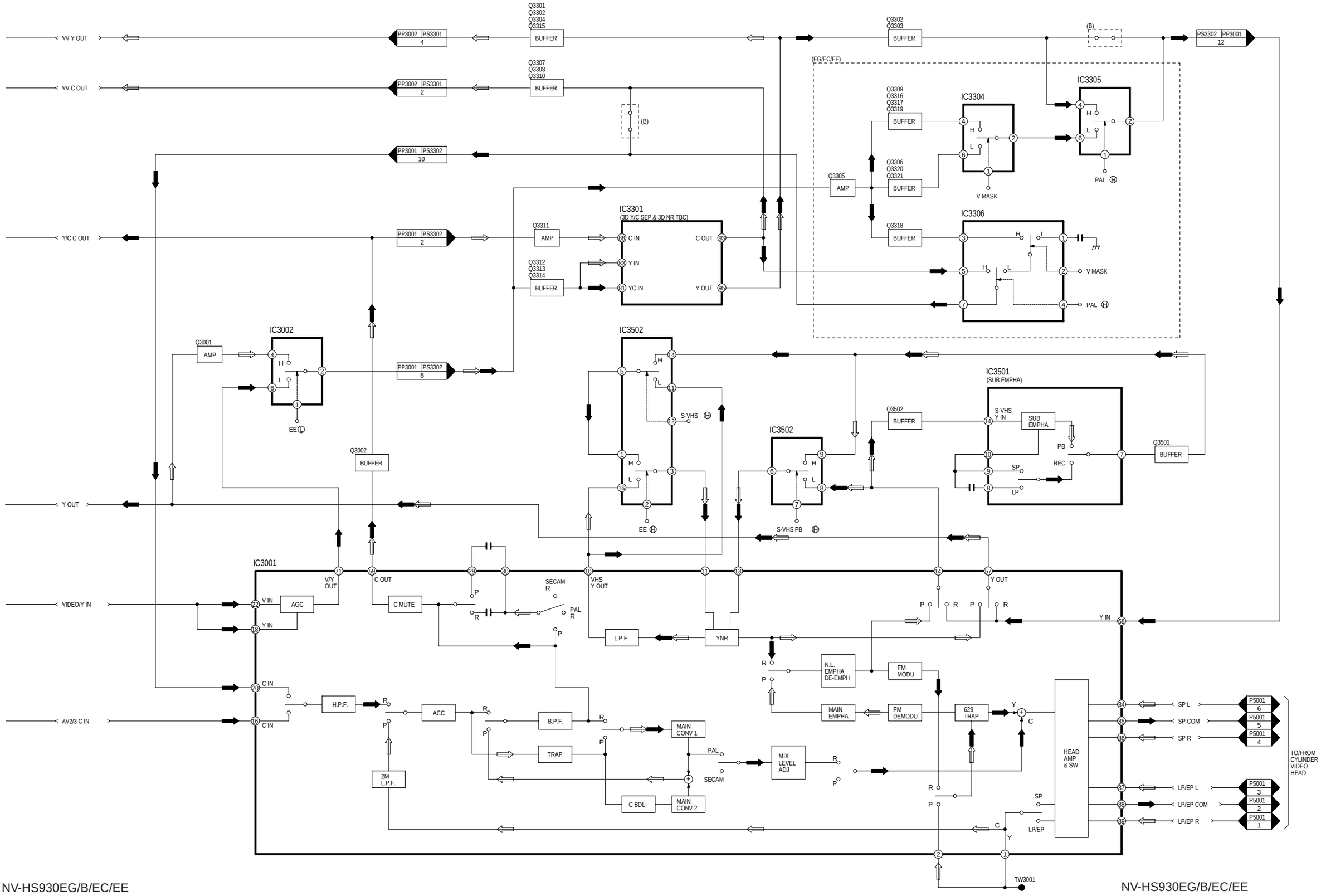
PS3904 PP3904 10
PS3905 PP3905 1
PS3904 PP3904 14
PS3905 PP3905 11
PS3905 PP3905 3
PS3905 PP3905 5
PP3904 PS3904 3
PP3904 PS3904 1
PP3905 PS3905 9

IC6004
4 H
6 L
2
1 EE(L)

IC7701
(OSD u-COM SLICER/ TAPE LIBRARY)
SYS LSN 42
SYS TLK 43
SYS CLK 44
TO/FROM SYSTEM CONTROL
CV IN 113
SYNC 109
Q7704 BUFFER
Q7701 BUFFER
P7702 12 P6004 1

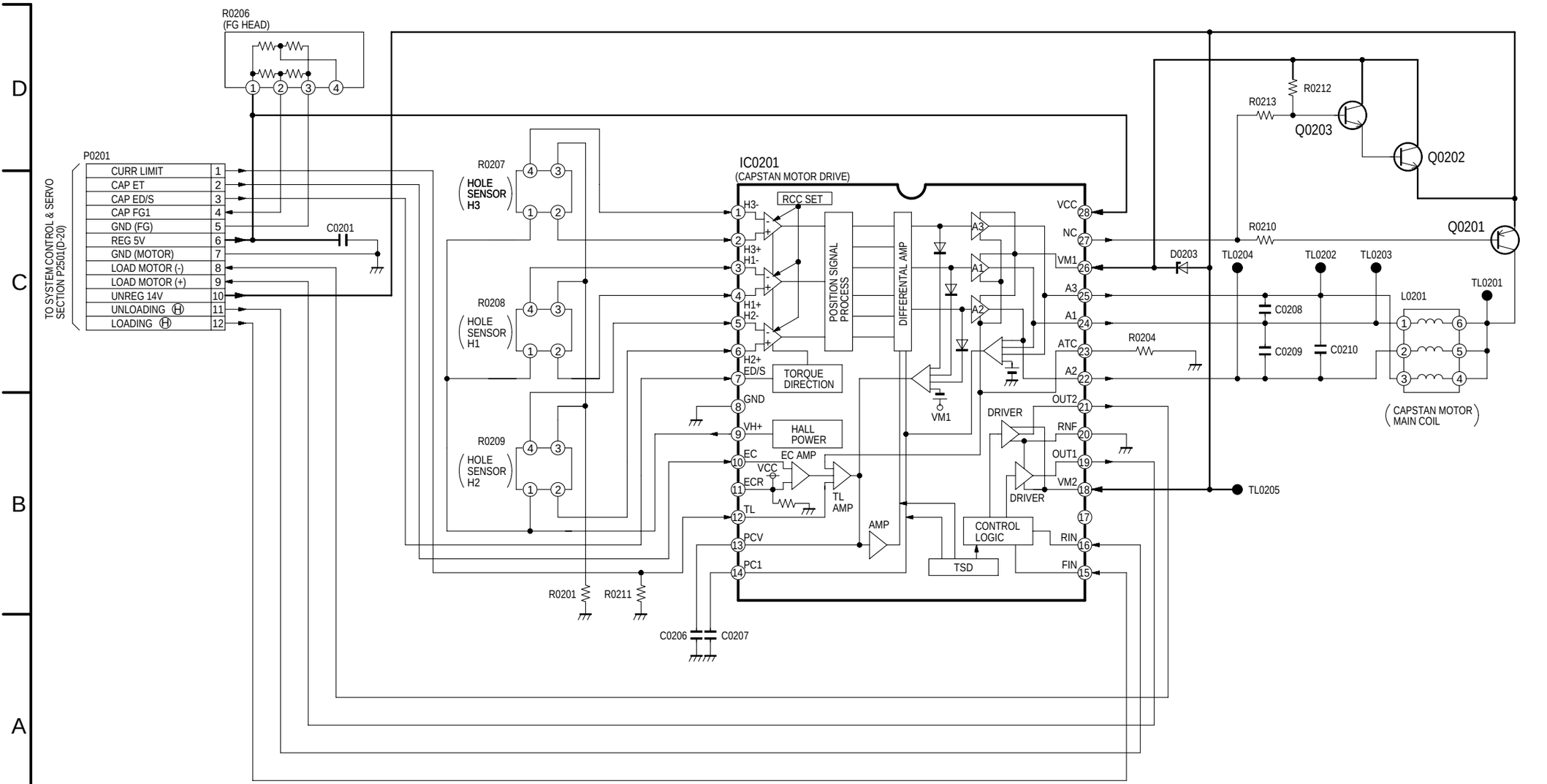
IC6001
Q6002 AMP
61
OSD SIGNAL PROCESS
56

NV-HS930EG/B/EC/EE
LUMINANCE & CHROMINANCE BLOCK DIAGRAM



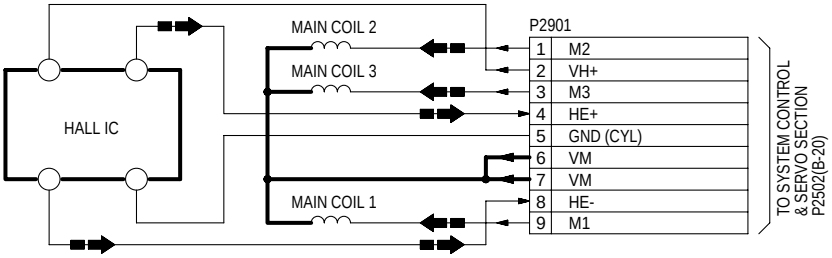
NV-HS930EG/B/EC/EE
LUMINANCE & CHROMINANCE BLOCK DIAGRAM

NV-HS930EG/B/EC/EE
LUMINANCE & CHROMINANCE BLOCK DIAGRAM



NV-HS930EG/B/EC/EE
CAPSTAN UNIT SCHEMATIC DIAGRAM

CYLINDER SERVO SPEED LOOP

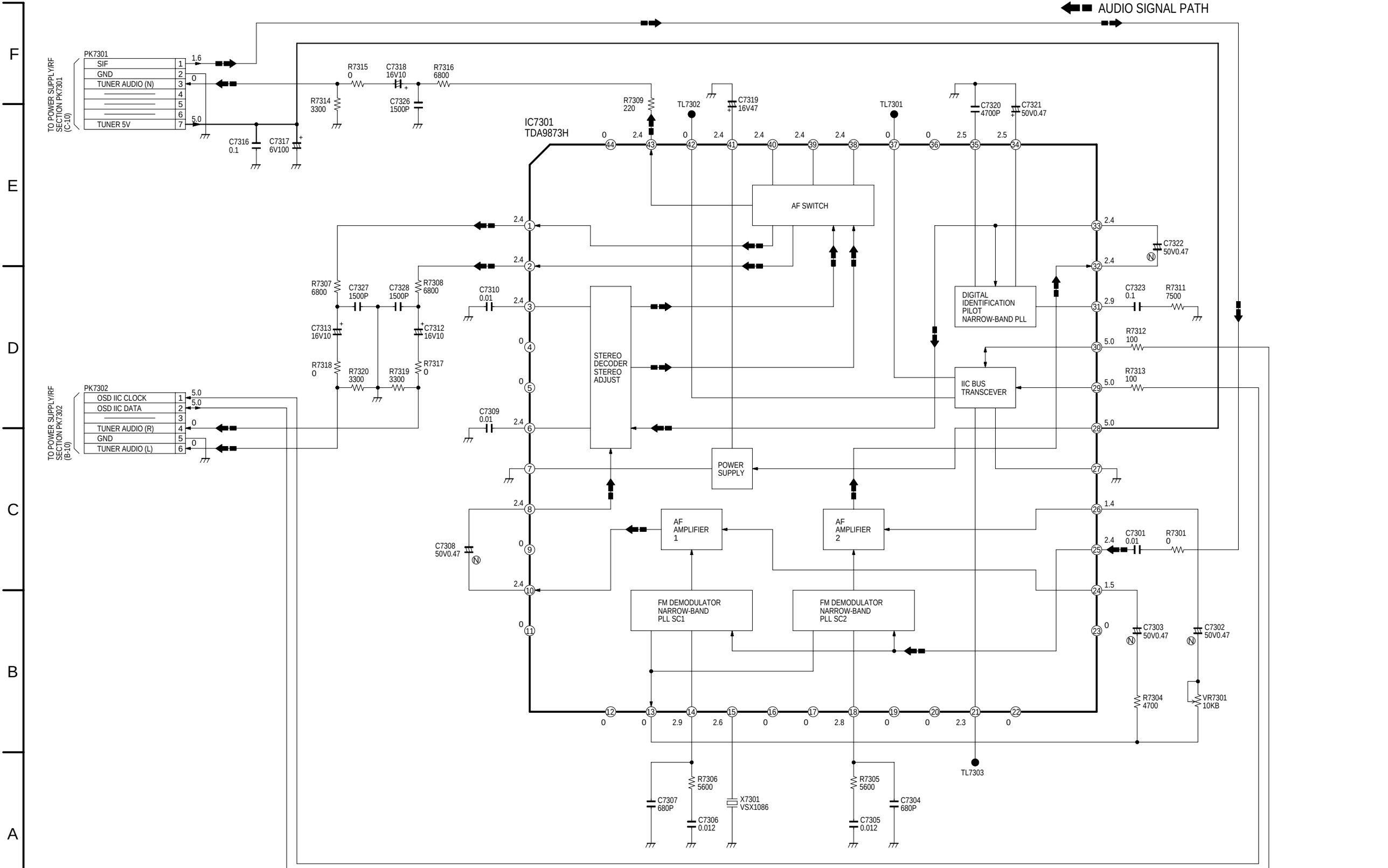


NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
CYLINDER STATOR SCHEMATIC DIAGRAM

A

1 2 3



NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG
DECODER PACK SCHEMATIC DIAGRAM

Ⓡ :TO POWER SUPPLY/RF SECTION
Ⓢ :TO SYSTEM CONTROL & SERVO SECTION
Ⓥ :TO LUMINANCE & CHROMINANCE/AUDIO SECTION
Ⓣ :TO TIMER SECTION

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

TO INPUT/OUTPUT PACK PS3901(H-1)
PP3901: GND (AV) 1, GND (AV) 2, GND (AV) 3

TO INPUT/OUTPUT PACK PS3902(G-1)
PP3902: RFC VIDEO OUT 1, GND (AV) 2, AV1 A IN (R) 3, AV2 A IN (R) 4, GND (AV) 5, AV1 A IN (L) 6, AV2 A IN (L) 7, GND (AV) 8, AV1 A OUT (L) 9, AV1 A OUT (R) 10, GND (AV) 11, AV2 A OUT (R) 12, AV2 A OUT (L) 13, AV1 PB 12V 14

TO INPUT/OUTPUT PACK PS3903(E-1)
PP3903: LANC 1, PS 5V 2, GND (SYS) 3, 5P CLOCK 4, 5P DATA 5, GND (SYS) 6

TO INPUT/OUTPUT PACK PS3904(D-1)
PP3904: AV3 C IN 1, PS 12V 2, AV3 VIDEO IN 3, 4, TUNER VIDEO IN 5, GND (AV) 6, OSD IIC DATA 7, OSD IIC CLOCK 8, GND (AV) 9, VV C OUT 10, GND (AV) 11, 12, PS 5V 13, Y/C C OUT 14, OSD PULSE 15, PROG Ⓗ 16

TO INPUT/OUTPUT PACK PS3905(C-1)
PP3905: Y/C Y OUT 1, GND (AV) 2, VIDEO/Y IN 3, GND (AV) 4, AV2/AV3 C IN 5, GND (AV) 6, PS 5V 7, GND (AV) 8, AV3 Y IN 9, GND (AV) 10, OSD VIDEO OUT 11, AV2 PB Ⓗ 12, PROJECT 50 13, S-VHS SW Ⓛ 14

TO FRONT PS4801(B-1)
PP3906: DNR SW 1, IR 2, N.SW 5V 3, AV3 A IN (R) 4, GND (AV) 5, EJECT SW 6, POWER SW 7, GND (AV) 8, AV3 VIDEO IN 9, GND (FIP) 10, AV3 A IN (L) 11, AV3 C IN 12, GND (AV) 13, AV3 Y IN 14, AV3 S-VHS IN Ⓛ 15, DNR LED 16
TW3901

Ⓢ MAIN IIC CLOCK (A3)
Ⓢ MAIN IIC DATA (A2)
Ⓥ FSC (A1)
Ⓢ MUTE Ⓗ (A4)

QR4501 UN2113 (BUFFER) -1.4 (-0.6)
QR4503 XN0121600L (MUTE) -1.4 (-0.6)
QR4504 XN0121600L (MUTE) -1.4 (-0.6)
QR4502 UN2113 (BUFFER) -1.3 (-0.6)
QR4507 UN2216 (MUTE)

L4502 1.2u
L4503 0
L4501 1.2u

IC4501 AN3656NFBPBV

IIC BUS INTERFACE
SWITCH RCH
SWITCH LCH
OUTPUT SELECT SWITCH RCH
OUTPUT SELECT SWITCH LCH
NORMAL OUTPUT SWITCH
DET
INPUT SWITCH RCH
INPUT SWITCH LCH
AGC & SWITCH
FM MODULATOR/ DEMODULATOR
BPF
LPF
AGC
PNR RCH
PNR LCH
PREAMP & SWITCH

VCO-FO
VCC
GND(R)
REC AGC ADJ.
MUTE CONTROL
REC AGC DET
ENV.DET OUT
REC DC2
VREF
GND (L)
VCC2

D.FM REC Ⓗ Ⓢ
ABS NORMAL Ⓗ Ⓢ
A.HEAD SW Ⓢ
GND (A) Ⓥ
AUDIO HEAD L Ⓥ
AUDIO HEAD R Ⓥ
AUDIO HEAD COM Ⓥ
RFC VIDEO OUT Ⓡ
AV1 PB 12V Ⓢ
LANC Ⓢ
5P CLOCK Ⓢ
5P DATA Ⓢ
TUNER VIDEO Ⓡ
OSD IIC DATA Ⓢ
OSD IIC CLOCK Ⓢ
VV C OUT Ⓥ
Y/C C OUT Ⓥ
OSD PULSE Ⓢ
PROG Ⓗ Ⓢ
Y/C Y OUT Ⓥ
VIDEO/Y IN Ⓥ
AV2/AV3 C IN Ⓥ
OSD VIDEO OUT Ⓢ
AV2 PB Ⓗ Ⓢ
PROJECT 50 Ⓢ
S-VHS SW Ⓛ Ⓢ
DNR SW Ⓣ
IR Ⓢ
EJECT SW Ⓣ
POWER SW Ⓣ
AV3 S-VHS IN Ⓛ Ⓢ
DNR LED Ⓢ
AUDIO IN (N) Ⓥ
RFC AUDIO OUT Ⓡ
AUDIO OUT (N) Ⓥ
TUNER AUDIO (R) Ⓡ
TUNER AUDIO (L) Ⓡ
GND Ⓡ
GND (SYS) Ⓡ
GND (LVM) Ⓡ
GND (HA2) Ⓡ

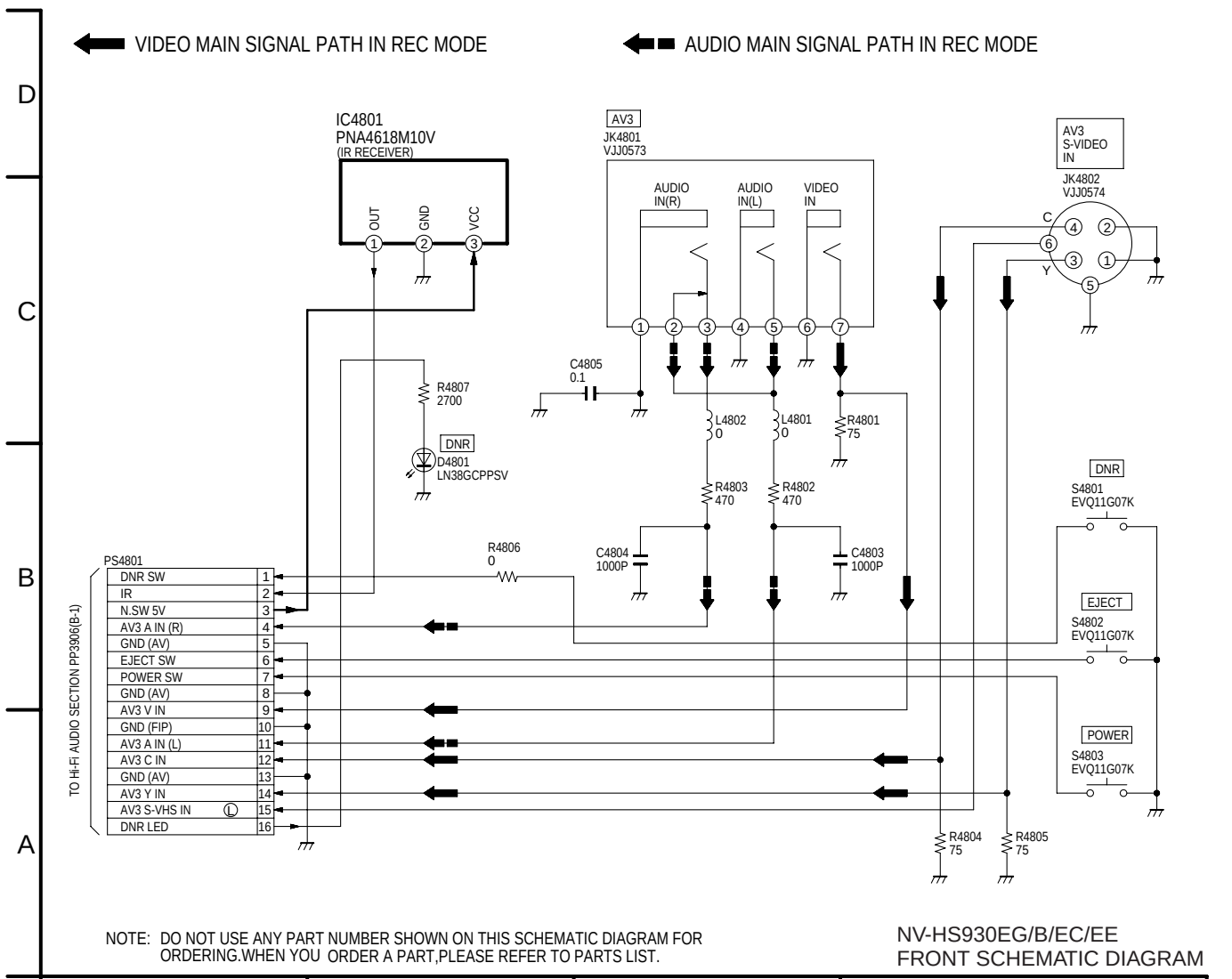
Ⓢ AC RCH
Ⓢ AC LCH
Ⓢ RFC MUTE Ⓗ
Ⓡ PS 5V
Ⓡ N.SW 5V
Ⓡ PS 12V

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.(SP MODE)

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
Hi-Fi AUDIO SECTION SCHEMATIC DIAGRAM



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
FRONT SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

TO HI-FI AUDIO SECTION PP3904(G-1)
PS3901: GND (AV) 1, GND (AV) 2, GND (AV) 3

TO HI-FI AUDIO SECTION PP3902(F-1)
PS3902: RFC VIDEO OUT 1, GND (AV) 2, AV1 A IN (R) 3, AV2 A IN (R) 4, GND (AV) 5, AV1 A IN (L) 6, AV2 A IN (L) 7, GND (AV) 8, AV1 A OUT (L) 9, AV1 A OUT (R) 10, GND (AV) 11, AV2 A OUT (R) 12, AV2 A OUT (L) 13, AV1 PB (H) 14

TO HI-FI AUDIO SECTION PP3903(E-1)
PS3903: LANC 1, PS 5V 2, GND (SYS) 3, 5P CLOCK 4, 5P DATA 5, GND (SYS) 6

TO HI-FI AUDIO SECTION PP3904(E-1)
PS3904: AV3 C IN 1, PS 12V 2, AV3 VIDEO IN 3, 4, TUNER VIDEO IN 5, GND (AV) 6, OSD IIC DATA 7, OSD IIC CLOCK 8, GND (AV) 9, VV C OUT 10, GND (AV) 11, 12, PS 5V 13, Y/C C OUT 14, OSD PLUSE 15, PROG (H) 16

TO HI-FI AUDIO SECTION PP3905(C-1)
PS3905: Y/C Y OUT 1, GND (AV) 2, VIDEO/Y IN 3, GND (AV) 4, AV2/AV3 C IN 5, GND (AV) 6, 7, GND (AV) 8, AV3 Y IN 9, GND (AV) 10, OSD VIDEO OUT 11, AV2 PB (H) 12, PROJECT 50 13, S-VHS SW (L) 14

L4902 33u, C4914 6V100, C4915 0.1, R4911 330, Q4903 2SB709A (INV.), Q4902 2SD601A (AMP), R4910 47K, R4912 120, R4913 120, QR4901 UN2113 (AV2 S IN (H):OFF), QR4902 UN2113 (RGB ON:ON), R3912 4700, R4909 68K, C4913 16V10

R4914 75, R3917 22K, QR3902 UN2215 (SWITCHING), R3916 18K, Q3902 2SD601A (AV2 PB:ON), D3901 MA165, R3919 470, R3918 470K, R3920 22K, R3914 39K, R3915 4700, QR3901 UN2212 (RGB OFF (H):ON), Q4901 2SD1328 (RGB ON:ON), S4901 VSS0513 (AV1 OUT NORMAL ↔ S), R4917 75, R3913 0

TP3002

C3915 0.01, C3916 0.1, C3917 0.1, R3910 4700, C3918 0.1, C3926 0.1, C3919 6V330, C3920 1, C3921 6V330, C3922 0.1, C3923 0.01, C3924 0.1

IC3901 LA73023V

44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	
C MUTE CTL1	C MUTE CTL2	CPN C IN1	FUNC SW P1	V IN3	FUNC SW P2	CPN Y IN1	EXT CTL5	V IN2	VCC	V OUT AV2	V OUT AV1	GND	CON Y OUT	CPN C OUT	CPS OUT	CTL VCC	CPN Y IN2	AV2 S IN (H)	CPN C IN2	RGB OFF (H)	V IN1	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
DATA	CLOCK	POWER SAVE CTL	CPN C IN3	Y DC CTL	CPN Y IN3	Y DC ADJ	CPN C IN1	ADR CTL	CPN Y IN1	GND	CON C OUT	CPN Y OUT	CPS OUT	REG FIL	V IN4	REF DC	CON C IN2	EXT CTL1	CON Y IN2	EXT CTL2	V IN5	

INTER-FACE, IIC BUS INTERFACE, CLAMP, MUTE

VIDEO OUTPUT SELECT SW (AV2), VIDEO OUTPUT SELECT SW (AV1)
CPN Y OUTPUT SELECT SW & SUPERIMPOSE, CPN C OUTPUT SELECT SW & SUPERIMPOSE
CPN Y INPUT SELECT SW, CPN C INPUT SELECT SW, VIDEO INPUT SELECT SW

R3909 220, R3908 220, C3914 0.01, C3913 0.1, C3912 0.1, C3911 0.01, R3928 0, R3927 0, C3910 1, C3909 0.01, C3908 0.1, C3907 0.01, C3906 0.1, C3905 0.01
R3907 1K, R3906 1K
TP3023, TP3022

L3901 33u, C3927 6V330, C3928 0.1, C3929 6V47, L3905 33u
R3904 1K, R3905 2700
Q3901 2SD601A (AMP)
R3901 1K, C3901 47P, L3902 39u, C3902 27P, C3903 4P, C3904 15P, L3903 82u, R3903 1K, R3902 1K

TP3021, TP3024, TP3090, JK4904 VJJ0574 (S-VIDEO OUT)
R4918 75, R4919 75

JK4903 VJJ0416
LB4910 VLP0147, LB4911 470, LB4912 VLP0147, LB4913 470, C4918 470P, C4916 470P, R4915 75
AUDIO OUT(R), AUDIO OUT(L), VIDEO OUT

TP4503, TP4504, LB4908 VLP0147, R4906 470, LB4909 VLP0147, R4907 470
TP4505, TP4506, LB4905 VLP0147, LB4906 VLP0147, C4909 470P, C4910 470P, C4907 47P, C4908 47P, LB4901 0.22u

AV1
JK4902 VJS1470

(TV)	
1	AUDIO OUT CH2 (R)
2	AUDIO IN CH2 (R)
3	AUDIO OUT CH1 (L)
4	GND (A)
5	GND (BLUE)
6	AUDIO IN CH1 (L)
7	BLUE
8	PB +12V
9	GND (GREEN)
10	CONTROL
11	GREEN
12	
13	GND (RED)
14	GND (BLANK)
15	RED/C OUT
16	BLANKING
17	GND (V OUT)
18	
19	VIDEO OUT/Y OUT
20	VIDEO IN
21	GND

R4916 75, R4908 75, TP3003
LB4903 VLP0147, R4901 470, LB4904 VLP0147, R4902 470

AV2
JK4901 VJS1470

(DECODER/EXT)	
1	AUDIO OUT CH2 (R)
2	AUDIO IN CH2 (R)
3	AUDIO OUT CH1 (L)
4	GND (A)
5	GND (BLUE)
6	AUDIO IN CH1 (L)
7	BLUE
8	AV2 +12V
9	GND (GREEN)
10	CONTROL
11	GREEN
12	DATA
13	GND (RED)
14	GND (BLANK)
15	RED/C IN
16	BLANKING
17	GND (V OUT)
18	GND (V IN)
19	VIDEO OUT
20	VIDEO IN/Y IN
21	GND

LB4901 VLP0147, C4903 470P, C4904 470P, LB4902 VLP0147, C4902 47P, C4901 47P
R4904 75, R4903 75, R4905 75

JK3901 VJJ0169 (8mm CONTROL)
D3902 MA4075NM, D3903 MA4075NM
JK3902 K2HZ105A0002 (EDIT)
R3923 10K, Q3904 2SD601A (PROG (H):ON), R3922 10K, Q3903 2SD601A (PROG (H):ON)

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.(SP MODE)

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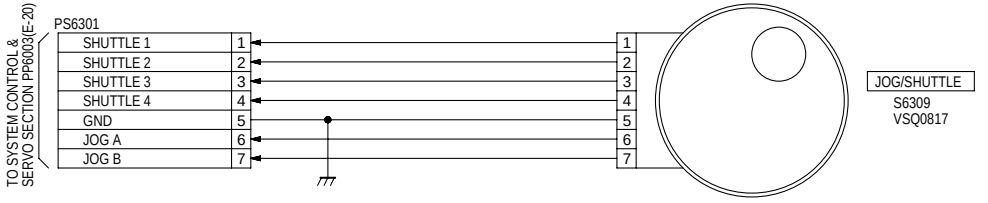
NV-HS930EG/B/EC/EE
INPUT/OUTPUT PACK SCHEMATIC DIAGRAM



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NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
JOG SCHEMATIC DIAGRAM

1 2 3 4

AUDIO SIGNAL PATH

L7302 1u

X7302 VSX0953

C7316 0.1 | R7327 8200 | R7325 0

TEST1 (22) 3.3 | VDDA2 (21) | VSSA2 (20) | VDDR2 (19) 2.0 | 1 REF (18) | TEST2 (17) | TP3 (16) 1.6 | XTAL I (15) 1.6 | XTAL O (14) | ADDR1 (13) 0.4 | PCLK (12)

PK7301 (TO POWER SUPPLY/RF SECTION PK7301 (C-10))
- 1 QPSK/SIF 1.6
- 2 GND 0
- 3 TUNER AUDIO (N)
- 4
- 5
- 6
- 7 TUNER 5V 4.9

C7307 0.01 | R7302 0 | C7311 0

IC7302 PST7043
(RESET) IN (1) 4.9 | GND (2) | OUT (3) 4.9

C7343 2200P | L7301 0

C7308 50V2.2 | C7312 22P

R7305 100 | R7306 100

C7305 33P | C7306 33P

PK7302 (TO POWER SUPPLY/RF SECTION PK7302 (B-10))
- 1 OSD IIC CLOCK 4.8
- 2 OSD IIC DATA 4.6
- 3
- 4 TUNER AUDIO (R) 0
- 5 GND
- 6 TUNER AUDIO (L) 0

FL7301 VLF0633

C7304 6V100 | C7301 0.01

C7341 4700P | C7342 4700P

C7315 0.1

2.0 SIF2 (23) | 2.0 VREF1 (24) | 2.0 SIF1 (25) | 4.9 CRESET (26) | VSSA3 (27) | 4.9 VDDA3 (28) | 4.8 SCL (29) | 4.6 SDA (30) | 1.2 SDO (31) | 1.2 WS (32) | 1.2 SCK (33)

INPUT SWITCH AGC, ADC

FM/AM DEMODULATION

IDENTIFI-CATION

IIC BUS INTERFACE

IIC BUS INTERFACE

NICAM DEMODULATION

DEMATRIX

NICAM DECODER

2 CHANNEL ANALOG/ SATELLITE DECODER

DIGITAL SELECTOR

LEVEL ADJUST

POST FILTER 3 DACS

2 CHANNEL OUTPUT BUFFERS

ANALOG CROSSBAR SWITCH

MONO CHANNEL OUTPUT BUFFERS

SYS CLK (34) 1.2 | VDDD3 (35) 4.8 | VSSD3 (36) | P1 (37) 4.9 | MONO IN (38) 2.4 | EXTIR (39) 2.4 | EXTIL (40) 2.4 | VREF2 (41) 2.4 | P2 (42) 4.9 | OUT M (43) 2.5 | VSSA4 (44)

R7316 10K | LB7303 0 | C7313 0.1

TL7301 | TL7303 | TL7304

C7318 6V47

R7324 220 | C7317 16V10

R7328 220 | C7319 16V10

R7329 220 | C7320 16V10

TP1 (11) | NICAM (10) 0.4 | TP2 (9) | VDEC2 (8) 0 | VSSD2 (7) | VDDD1 (6) 4.8 | VSSD1 (5) | VSSA1 (4) | VDDA1 (3) 4.9 | OUT R (2) 2.5 | OUT L (1) 2.5

LB7301 0 | C7325 0.1

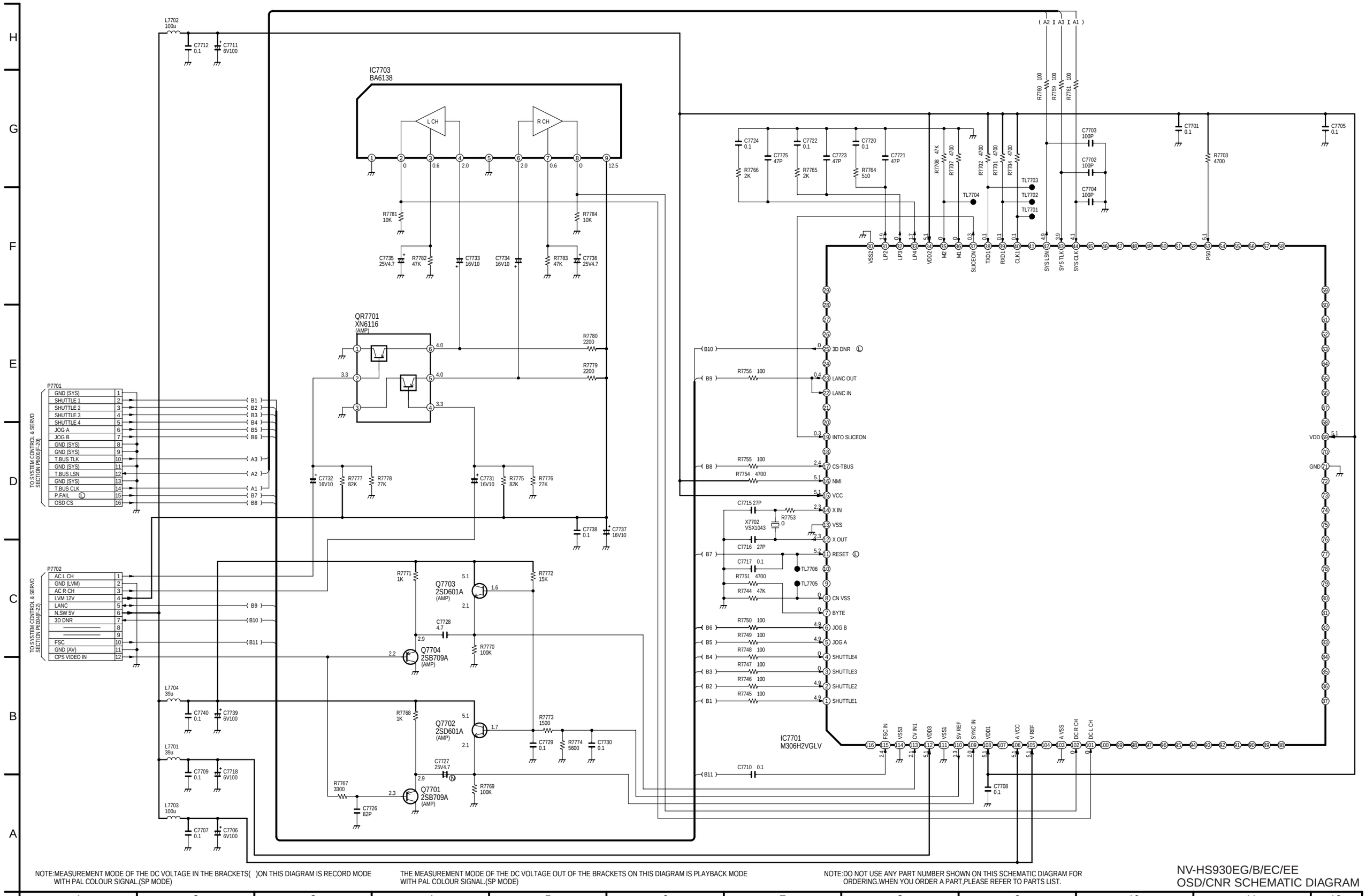
C7324 0.1

IC7301 TDA9874AH

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930B/EC/EE
NICAM DECODER PACK SCHEMATIC DIAGRAM



NOTE:MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.(SP MODE)

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

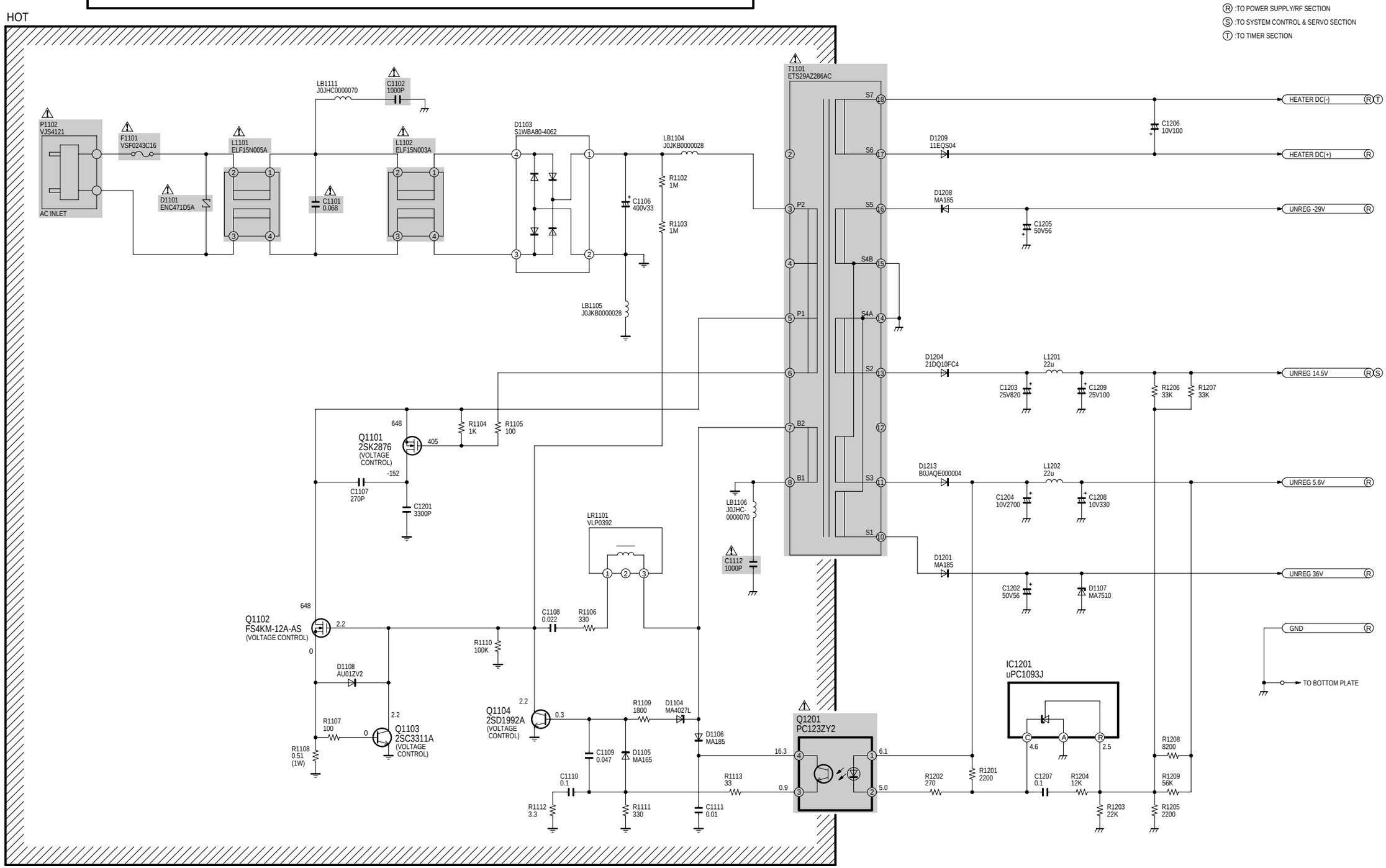
NV-HS930EG/B/EC/EE
OSD/CNR SCHEMATIC DIAGRAM

CAUTION

THE STRIPED FRAME INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

HOT

Ⓡ :TO POWER SUPPLY/RF SECTION
Ⓢ :TO SYSTEM CONTROL & SERVO SECTION
Ⓣ :TO TIMER SECTION



NOTE1:WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT,SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE..... ⏚
SECONDARY SIDE... ⏚

NOTE2:THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.
NOTE:THE MEASURMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,USE ONLY THE SAME TYPE.

NV-HS930EG/B/EC/EE
POWER TRANSFORMER
SECTION SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

(P) :TO POWER TRANSFORMER SECTION
(S) :TO SYSTEM CONTROL & SERVO SECTION
(V) :TO LUMINANCE & CHROMINANCE/AUDIO SECTION
(A) :TO Hi-Fi AUDIO SECTION
(T) :TO TIMER SECTION

TU7601
TUNER UNIT
ENG47327G1:EG/EC
ENG47328G1:B
ENG47329G1:EE

Q1001 2SD602A (BUFFER)
QR1002 UN2212 (FIP ON/OFF CONTROL)
QR1003 UN2112 (FIP Ⓛ:ON)
Q1011 2SC1959Y (12V REG)
QR1006 UN2211 (POWER OFF Ⓗ:ON)
Q1003 2SB710A (POWER SAVE:OFF)
Q1008 2SC1959Y (5V REG)
Q1009 2SC1959Y (5V REG)
Q1010 2SC1959Y (5V REG)
Q1012 2SC1959Y (3.3V REG)
Q1005 2SC1959Y (12V REG)
Q1004 2SD601A (VOLTAGE CONTROL)
IC1001 UPC1093J
Q1007 2SD602A (5V REG)
Q1002 2SC1959Y (5V REG)
Q1006 2SC1959Y (5V REG)
Q7601 2SD601A (MUTE)

P HEATER DC (-)
P HEATER DC (+)
T HEATER (+)
P UNREG -29V
T FIP -29V
S FIP Ⓛ
S POWER OFF Ⓗ
S POWER SAVE Ⓗ
P UNREG 36V
P UNREG 14.5V
P UNREG 5.6V
P GND
S GND
S GND (SYS)
S GND (FG)
S GND (MOTER)
S GND (CYL)
S GND (AV)
V GND
V GND (SYS)
V GND (HA)
V GND (HA2)
A GND
A GND (SYS)
A GND (LVM)
A GND (HA2)
T GND
V REG 3.3V
V DIGITAL 5V
S V VIDEO 5V
S REG 5V
S V A PS 12V
S LVM 12V
S V A PS 5V
V BIAS 5V
S V N.SW 5V
A T N.SW 5V
S AUDIO DEF Ⓗ
A RFC VIDEO OUT
A TUNER AUDIO (L)
A TUNER AUDIO (R)
S OSD IIC DATA
S OSD IIC CLOCK
V TUNER AUDIO (N)
A TUNER VIDEO
S AFC S-CURVE
S SW2
S MAIN IIC DATA
S MAIN IIC CLOCK
A RFC AUDIO OUT

TU7601 pins: 1 N.SW 5V; 2 AUDIO OUT; 3 DATA; 4 PS 5V; 5 CLOCK; 6 VIDEO OUT; 7; 8; 9; 10; 11 CLOCK; 12 DATA; 13; 14 TUNER 5V; 15 SW1; 16 BTL 30V; 17 IF OUT; 18 IF IN

DU7601
19 SW1 — PK0701-1
20 SW2 — PK0701-2
21 ——— — PK0701-3
22 SIF/QPSK — PK0701-4
23 AFC S-CURVE — PK0701-5
24 TUNER VIDEO — PK0701-6
25 TUNER 5V — PK0701-7
26 ——— — PK0701-8
27 GND — PK0701-9
TO TV (DEMODULATOR PACK PK0701(D-1))

PK7301
1 SIF/QPSK
2 GND
3 TUNER AUDIO (N)
4 ———
5 ———
6 ———
7 TUNER 5V
TO DECODER PACK PK7301(F-1):EG
TO NICAM DECODER PACK PK7301(D-1):B/EC/EE

PK7302
1 OSD IIC CLOCK
2 OSD IIC DATA
3 ———
4 TUNER AUDIO (R)
5 GND
6 TUNER AUDIO (L)
TO DECODER PACK PK7302(D-1):EG
TO NICAM DECODER PACK PK7302(C-1):B/EC/EE

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,USE ONLY THE SAME TYPE.

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
POWER SUPPLY/RF SECTION SCHEMATIC DIAGRAM

Ⓟ :TO POWER TRANSFORMER SECTION
Ⓡ :TO POWER SUPPLY/RF SECTION
Ⓥ :TO LUMINANCE & CHROMINANCE/AUDIO SECTION
Ⓐ :TO Hi-Fi AUDIO SECTION
Ⓣ :TO TIMER SECTION

CAPSTAN SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP

IC6001 M37970VXLK

QR6002 XN1212 (A.DUB Ⓗ :ON)

Q1501 PNB2301MBV (T-PHOTO)
Q1502 PNB2301MAV (S-PHOTO)
SENSOR D1501 SIR505S

S1502 K0L1BA000026 (S-VHS CASSETTE)

S1501 K0G934A-00002 (MODE SW)

Q6008 2SD601A (AV1 PB:ON)
QR6001 UN2215 (AV1 PB Ⓛ :OFF)

IC1502 RPI354N (S-REEL)
IC1501 RPI354N (T-REEL)

Q6002 2SB709A (AMP)

TW2002 TW2015 TW6002 TW2001
TL6013 TL6012 TL6010 TL2503 TL2502

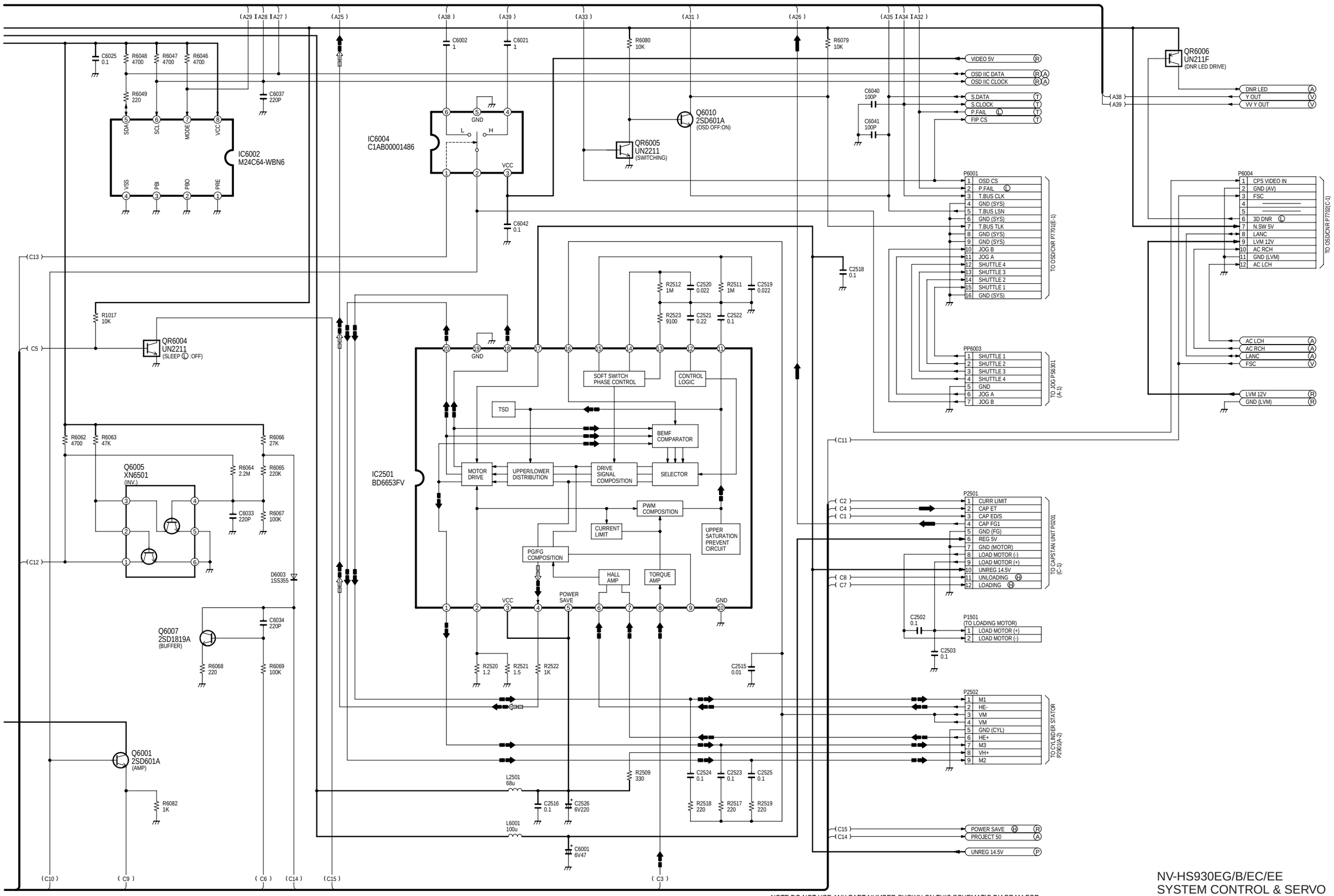
X6002 H0H200-500011
X6001 VSX1022

L6002 0.56u
L6005 68u

(A23) (A7) (A8) (A25) (A26) (A9) (A27) (A28) (A10) (A11) (A29) (A12) (A13) (A14) (A31)

(B15) (B16) (B17) (B18) (B19) (B20) (B21) (B2) (B1) (B3) (B22) (B23) (B24) (B25) (B26)

NV-HS930EG/B/EC/EE SYSTEM CONTROL & SERVO SECTION SCHEMATIC DIAGRAM



NV-HS930EG/B/EC/EE SYSTEM CONTROL & SERVO SECTION SCHEMATIC DIAGRAM

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
SYSTEM CONTROL & SERVO
SECTION SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH PLAYBACK MODE

TO LUMINANCE & CHROMINANCE/ AUDIO SECTION PP3002(F-23)

PS3301: GND (DNR) 1, VV C OUT 2, GND (DNR) 3, VV Y OUT 4, REG 12V 5, EE 6

TO LUMINANCE & CHROMINANCE/ AUDIO SECTION PP3001(E-23)

PS3302: TBC MODE 0 1, Y/C C OUT 2, ADV 3, HEAD SW 4, GND (DNR) 5, SEP IN 6, 7, 8, GND (DNR) 9, SEP C OUT 10, GND (DNR) 11, SEP Y OUT 12, GND (DNR) 13, REG 3.3V 14, FSC 15, DIGITAL 5V 16, MAIN IIC DATA 17, MAIN IIC CLOCK 18

Q3313 2SB1218A (INV.)
Q3314 2SD1819A (AMP)
Q3312 2SB1218A (AMP)
QR3301 DTC363EK (PB:ON)
Q3311 2SD1819A (AMP)
Q3310 2SD1819A (AMP)
Q3307 2SD1819A (AMP)
Q3308 2SD1819A (AMP)
Q3303 2SD1819A (AMP)
Q3304 2SB1218A (INV.)
Q3301 2SD1819A (AMP)
Q3315 2SB1218A (AMP)
Q3302 2SB1218A (AMP)

IC3303 PQ1K253M2ZP (2.5V REG.): VIN, VOUT, GND, GND, VC, NR

IC3302 R3112N251A (RESET): OUT, CD, VDD, GND

IC3301 TC90A88F (3D Y/C SEP.& 3D NR TBC)

YC IN, VSS YAD, Y IN, VDD YAD, VRB YAD, VRB CAD, VDD CAD, C IN, VSS CAD, VRT CAD, A VSS1, VDD YCDA, C OUT, VSS YCDA, Y OUT, BIAS DA2, BIAS DA1, VREF DA, A VSS2, VDD PLL

VRTY AD, BIAS AD, CLAMP P, VSS IO3, SDA, SCK, VDD IO3, IIC SEL, RESET, D VSS3, MODE 2, MODE 3, D VDD3, TIN 14, TIN 13, TIN 12, TIN 11, TIN 10, VSS RAM3, TIN 9, TIN 8, VDD RAM3, TIN 7, TIN 6, TIN 5, TIN 4, TIN 3, TIN 2, TIN 1, VSS RAM2

VSS PLL, FSC IN, VDD VCO, FIL 1, FIL 2, VSS VCO, MODE 1, CSYNC IN, DOC IN, KILLER, TIN J6, D VDD1, TIN J5, DTMB, D VSS1, DT CLK, TOUT 1, TOUT 2, VDD RAM1, TOUT 3, TOUT 4, VSS RAM1, MASKP 1, VDD IO1, MASKP 2, PAL ID, VSS IO1, F50, NONST, SYNC DET

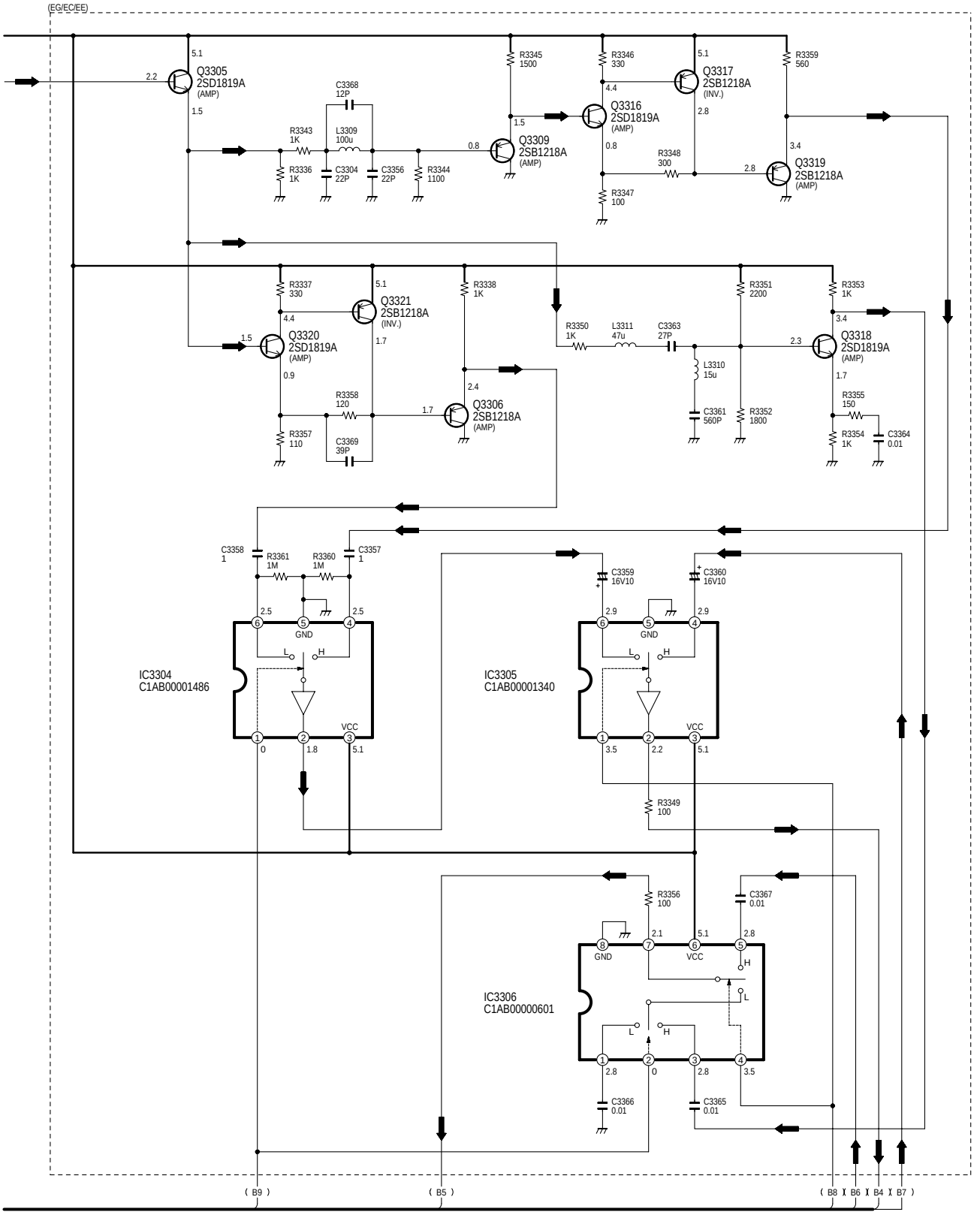
VDD RAM2, TBC WE, HSW IN, PV IN, ADV OUT, D VSS2, OSC CK, D VDD2, TEST 3, TEST 2, TEST 1, VSS IO2, HD OUT, VD OUT, VDD IO2, OSD A2, OSD A1, OSD B, OSD G, OSD R

PED. CLAMP, A/D 4FSC, DELAY ADJ., MEMORY, 3D Y/C SEP., TBC, 3D DNR, SYNC TIMING CONTROL, BIAS, DECODER, UP SAMPLING, ENCODER (BURST CHANGE), EQ, CNR, DELAY ADJ., EQ YNC, BLACK EXPANSION (SYNC CHANGE), YNR LNR, D/A 8FSC

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.(SP MODE)

NV-HS930EG/B/EC/EE
TBC/DNR PACK SCHEMATIC DIAGRAM

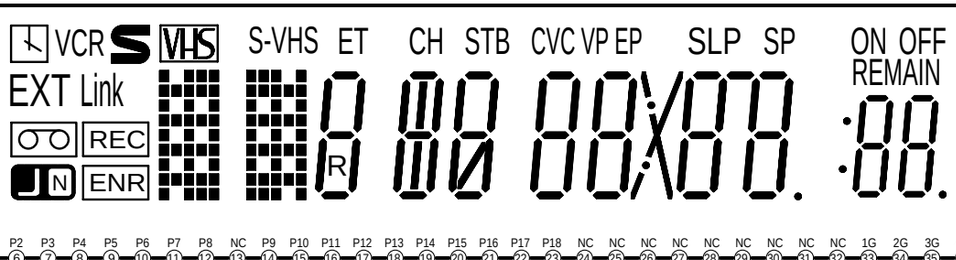


NV-HS930EG/B/EC/EE
TBC/DNR PACK SCHEMATIC DIAGRAM

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

Ⓟ :TO POWER TRANSFORMER SECTION
Ⓡ :TO POWER SUPPLY/RF SECTION
Ⓢ :TO SYSTEM CONTROL & SERVO SECTION
Ⓐ :TO Hi-Fi AUDIO SECTION

DP7501
A2BD00000057



R7507 68
R7508 68
C7501 0.01
Ⓡ HEATER(+)
Ⓟ HEATER DC(-)
D7501 MA4220NM
C7502 50V10
R7511 820
R7510 820
Ⓡ FIP -29V
R7509 100

F+ F+ P1 P2 P3 P4 P5 P6 P7 P8 NC P9 P10 P11 P12 P13 P14 P15 P16 P17 P18 NC NC NC NC NC NC NC NC NC 1G 2G 3G 4G 5G 6G 7G NC NC F- F-
1 2 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 44 45

-28.4 -28.3 -29.0 -29.4 -28.3 -28.1 -28.5 -24.3 -29.0 -24.3 -24.1 -24.3 -19.0 -24.3 -24.1 -14.3 -29.4 -29.4
36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19
S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 VEE

IC7501
M35502AFP

S.DATA S.CLOCK CS Ⓛ A3 A2 A5 A4 VSS OSC VCC G1 G2 G3 G4 G5 G6 G7 S18
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
4.9 5.0 2.4 5.2 5.2 5.2 5.2 2.3 5.2 -24.8 -24.8 -24.8 -24.8 -24.8 -24.8 -24.8 -29.4

R7512 0
C7503 12P

Ⓢ S.DATA
Ⓢ S.CLOCK
Ⓢ FIP CS
Ⓢ SAFETY TAB Ⓛ
SAFETY TAB
S7507 K0C111A00003
Ⓐ POWER SW
Ⓢ POWER KEY
R7521 22K
R7533 22K
R7517 10K
R7518 10K
R7513 30K
R7515 30K
R7516 30K
R7514 30K
Ⓡ N.SW 5V
Ⓡ GND
Ⓢ P.FAIL Ⓛ
C7511 0.1
IC7504 C0EBH0000218 (RESET)
5.2 RST
5.2 VDD
VSS
IC7503 C0EBE0000211 (RESET)
4.9 OUT
CD 4.4
4.9 VDD
GND 0
C7504 6V100
C7510 0.01
R7535 10K
C7509 6800P
D7503 RB441PT-77
R7534 180
C7507 VCE0073
C7508 6V220
Ⓢ RESET Ⓛ
Ⓢ BACK UP 5V
Ⓐ DNR SW
Ⓐ EJECT SW

CH UP S7504 EVQ11404M
STOP S7503 EVQ11404M
PLAY S7512 EVQ11G07K
R7506 4300
R7505 5600
R7504 8200
R7537 12K
CH DOWN S7502 EVQ11G07K
REC S7501 EVQ11G07K
PAUSE S7515 EVQ11L07B
TIMER REC S7513 EVQ11L07B
R7503 4300
R7502 5600
R7501 8200
R7538 12K
NC
EXT LINK S7508 EVQ11L07B
A.DUB S7509 EVQ11L07B
INSERT S7510 EVQ11G07K
TBC S7516 EVQ11G07K
R7519 4300
R7536 5600
R7522 8200
R7523 12K

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE:DO NOT USE PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLESE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
TIMER SECTION SCHEMATIC DIAGRAM

F E D C B A
1 2 3 4 5 6 7 8 9

VIDEO SIGNAL PATH

AUDIO SIGNAL PATH

(EE)

R0714 5600

R0732 4700

R0731 100

LB0701 VLP0147

R0713 0

R0740 470:EG/B/EC 270:EE

C0724 220P: EG/EC/EE 330P:B

R0717 470

R0711 180

R0745 3.3M

C0707 50V2.2

T0701 EVQ5EC082P:EG/EC EVQ5EC083P:B EVQ5EC081P:EE

R0729 10K

R0730 10K

R0701 100K

(EG/B/EC)

(EG/EC)

(B)

R0728 0

(EE)

R0709 100K

C0717 33P

R0727 0

C0719 0.1

C0708 50V 0.47

PK0701

DU7601-19	SW1	1
DU7601-20	SW2	2
DU7601-21	———	3
DU7601-22	SIF/QPSK	4
DU7601-23	AFC S-CURVE	5
DU7601-24	TUNER VIDEO	6
DU7601-25	TUNER 5V	7
DU7601-26	———	8
DU7601-27	GND	9

TO POWER SUPPLY/ RF SECTION DU7601 (D-10)

R0742 150

Q0702 2SD601A (AMP)

R0741 220

C0721 120P:EG/EC 82P:B 56P:EE

R0743 1K

IC0701 LA75503

BPF

AMP SW

EQ AMP

TRAP

LPF

VCO

FLL

AGC

AFT AMP

BPF

LIM AMP

FM DET

S PLL

FIL CONT

VIDEO DET

APC DET

1ST SIF DET

VIF AMP

IF AGC

1ST AMP

RF AGC

DEEMPHP

D0702 0

C0701 1

R0705 4700

R0708 10K

VR0701 10KB

R0707 39K

C0702 1000P

C0703 1

C0713 6V330

C0714 1

C0704 0.033

R0719 4700

C0712 0.1

X0704 VLF1493:EG/EC VLF1495:B VLF1497:EE

L0701 0.27u:EG/EC/EE 0.22u:B

(EE)

X0702 VLF1431

X0701 VLF1416:EG/EC VLF1417:B VLF1430:EE

(EG/EC)

K0701 56P

C0710 0.01

L0703 2.2u: EG/EC/EE 1.8u:B

R0725 100

C0715 3P: EG/EC/EE 12P:B

PP0701 (TO TUNER UNIT)

4MHz	1
AGC	2
IF	3
GND	4

C0711 16V22

R0715 22K

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
TV DEMODULATOR PACK SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

Ⓡ :TO POWER SUPPLY/RF SECTION
Ⓢ :TO SYSTEM CONTROL & SERVO SECTION
Ⓐ :TO Hi-Fi AUDIO SECTION

Ⓡ PS 5V
Ⓢ PAL EP Ⓗ
Ⓢ D.A REC Ⓗ
Ⓢ ET REC Ⓗ
Ⓢ MUTE Ⓗ
Ⓐ AUDIO OUT (N)
Ⓐ AUDIO IN (N)
Ⓡ TUNER AUDIO (N)
Ⓢ TRACKING ENV.
Ⓢ HEAD SW

P5001
(TO CYLINDER UNIT)
LP/EP R 1
LP/EP COM 2
LP/EP L 3
SP R 4
SP COM 5
SP L 6
GND (HA) 7
AUDIO HEAD L 8
AUDIO HEAD COM 9
AUDIO HEAD R 10

Ⓐ AUDIO HEAD R
Ⓐ AUDIO HEAD COM
Ⓐ AUDIO HEAD L
Ⓢ BIAS Ⓛ

P4002
(TO A/C HEAD)
AUDIO ERASE IN 1
GND (NA) 2
A.HEAD (R) 3
A.HEAD (W) 4
CTL HEAD (-) 5
CTL HEAD (+) 6

Ⓢ CTL HEAD (+)
Ⓢ CTL HEAD (-)
Ⓢ SHORT DET Ⓛ
Ⓢ FULL ERASE Ⓗ
Ⓢ V.EE Ⓛ

P4003
(TO FULL ERASE HEAD)
FULL ERASE GND 1
FULL ERASE IN 2

Ⓡ BIAS 5V
Ⓢ S-VHS Ⓗ
Ⓐ GND (A)
Ⓡ GND
Ⓡ GND (HA)
Ⓡ GND (HA2)
Ⓡ GND (SYS)
Ⓢ LP Ⓗ

(A1) (A2) (A3) (A4) (A5) (A6) (A7) (A8) (A9) (A10) (A11) (A12) (A13) (A14) (A15)

(A16) (A17) (A20) (A21) (A22)

R4081 7500
C4018 220P
T4002 EQQ7QF026P
C4019 0.15
C4021 4700P
R4082 3300
0.4 (-0.7)
0.4 (4.5)
Q4002 2SD602A (OSC)
L4002 68u
0.3 (4.8)
C4020 10V47
C4022 0.022

0 (4.9)
5.1
QR4005 UN2111 (D.A.REC Ⓗ:OFF)
5.2 (-22.6)
C4017 100P
R4084 4700
0.7 (-22.8)
0 (0.8)
Q4003 2SD1149 (PB:ON)
R4085 2200
0.7 (-22.8)
0 (-13.7)
Q4004 2SD601A (PB:ON)
QR4003 XN1215 (PAL EP Ⓗ:ON)
1.3
0
1.2
0

IC3002
C1AB00001340
C3041 4.7
C3040 4.7
3.0
GND
L
H
VCC
0.1 (4.9)
2.3
5.1
L3009 0
R3035 0
C3043 16V10
C3044 0.1

R4087 4700
C4023 10V22
R4086 6800
5.0 (4.3)
Q4001 2SB710A (BIAS Ⓛ:ON)
5.1
R4088 4700
C4024 16V10

T4001 EQQ7QF025P
C4029 0.022
C4027 2200P
R4091 6800
0.3 (-1.1)
0.3 (4.8)
Q4006 2SD602A (OSC)
L4003 68u
0.3 (5.1)
C4026 0.022
C4028 6V47

R4090 4700
5.1 (4.2)
Q4005 2SB710A (FULL ERASE DRIVE)
C4025 10V22
R4089 6800
5.1

C3518 0.01
L3019 0
L3018 0
L3017 0
R3074 0
R3076 0
C3063 0
R3503 1200
Q3501 2SB709A (AMP)
1.7
1.2

C3513 4.7
C3510 4.7
C3515 4.7
C3512 4.7
IC3502
M52065FP
GND
VCC
H
L
C3521 4.7
C3511 4.7

LB4005
J0JBC0000070

QR3005 UN2113 (VHS:ON)
QR3003 UN2213 (VHS:ON)
R3005 3300
L3002 82u
QR3007 UN2211 (PB:ON)
QR3006 UN2113 (PB:ON)
0.1 (4.9)
4.7 (0.2)
R3512 1K

C3517 0.1
Q3007 2SD601A (AMP)
C3058 150P
R3054 0
L3013 180u
R3053 56
R3055 560
C3057 47P
R3051 0

R3022 3900
C3509 4.7
R3513 390
R3511 1200
R3510 390K
Q3502 2SB709A (AMP)

C3508 270P
C3505 270P
R3506 3300
R3505 3300
C3504 270P
R3509 1K
C3506 82P
R3507 1K
R3508 470
C3503 220P
R3504 1500

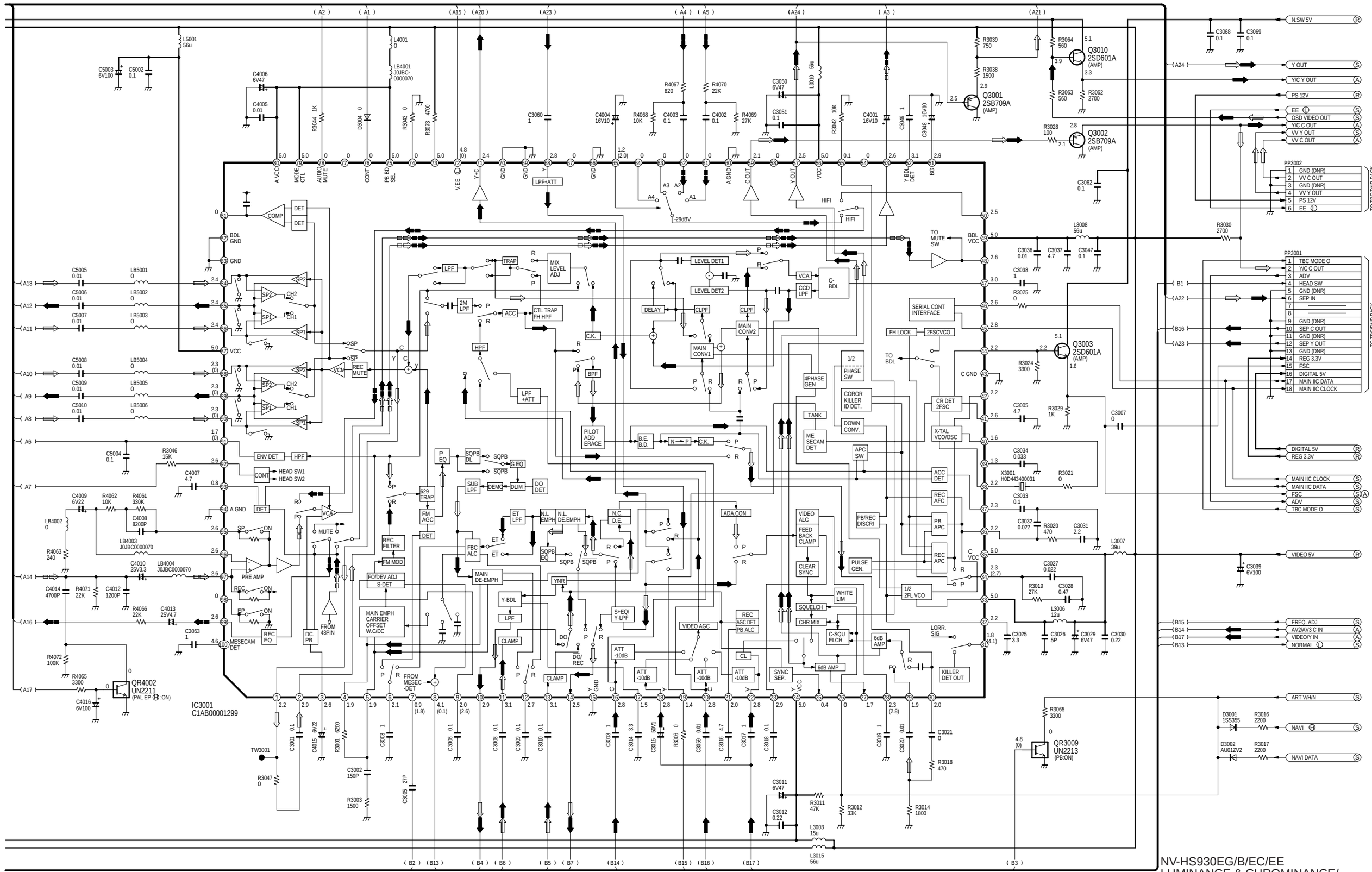
IC3501
AN3293S
SUB EMPHASIS
LOGIC
GND
VCC
SP
LP
PB
REC
C3501 4.7
C3502 4.7
C3507 6V47
C3516 0.1
R3501 2200
R3502 1500

(B1) (B2) (B3) (B4) (B5) (B6) (B7)

NOTE:THE MEASUREMENT MODE OF THE DC VLOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

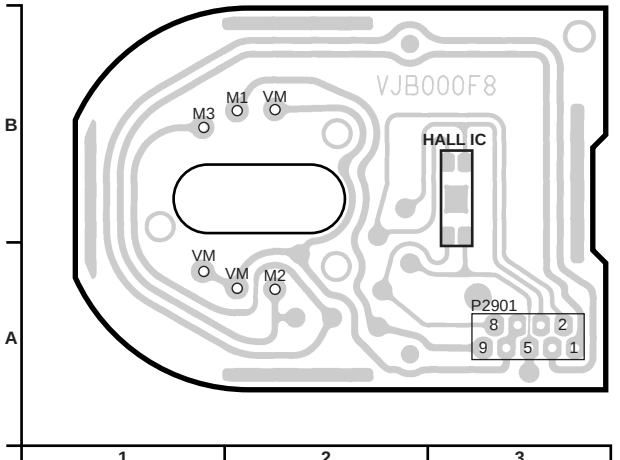
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.(SP MODE)

NV-HS930EG/B/EC/EE LUMINANCE & CHROMINANCE/AUDIO SECTION SCHEMATIC DIAGRAM



NV-HS930EG/B/EC/EE LUMINANCE & CHROMINANCE/AUDIO SECTION SCHEMATIC DIAGRAM

(VEM0715)



CYLINDER STATOR UNIT	
Integrated Circuit	
HALL IC	B-3
Connector	
P2901	A-3

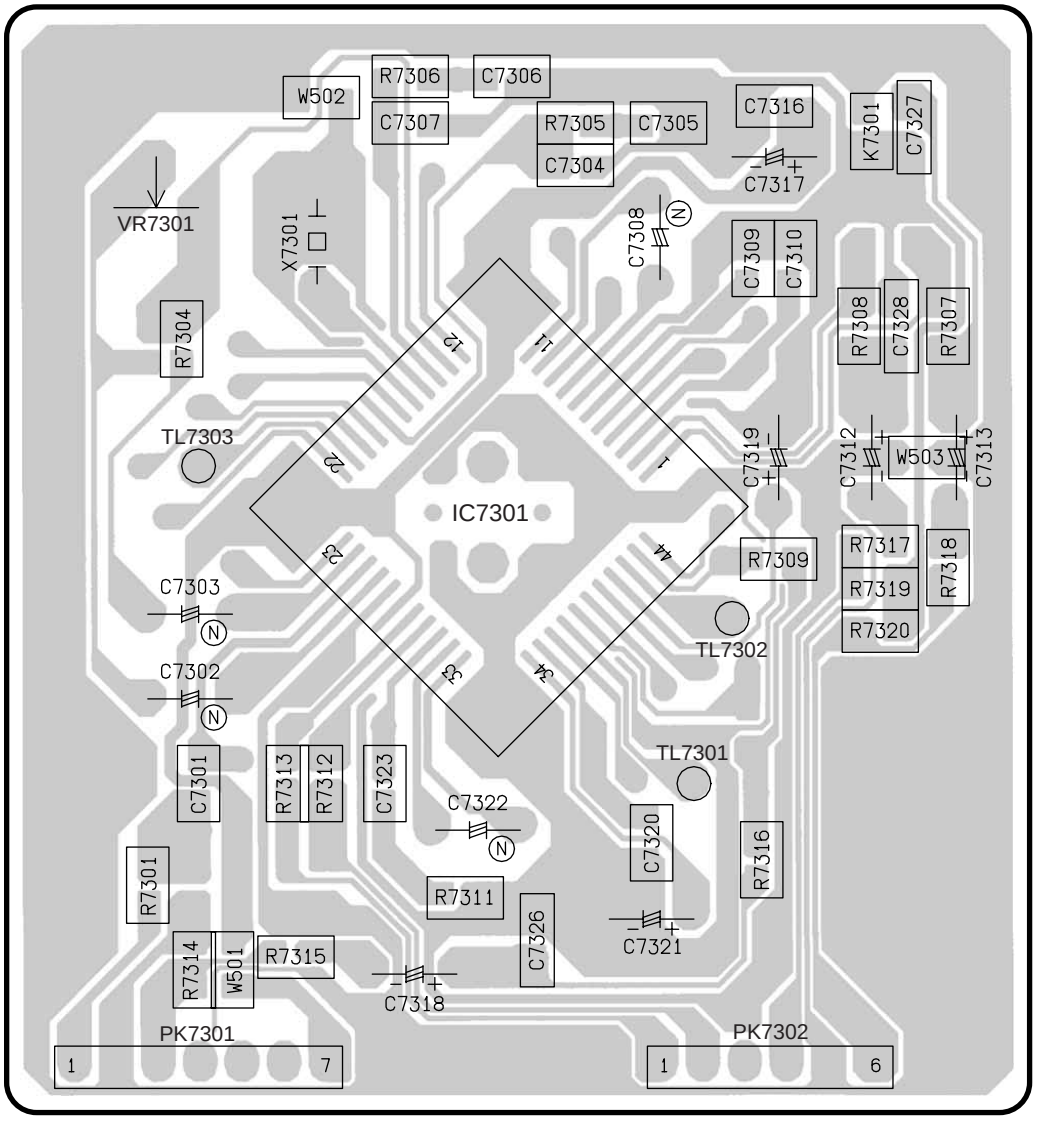
ADDRESS INFORMATION

NV-HS930EG/B/EC/EE
CYLINDER STATOR UNIT

DECODER PACK C.B.A.	
Integrated Circuit	
IC7301	B-2
Test Point	
TL7301	A-2
TL7302	B-2
TL7303	B-1
Adjustment	
VR7301	C-1
Connector	
PK7301	A-1
PK7302	A-2

ADDRESS INFORMATION

(VEP07A16A:NV-HS930EG)

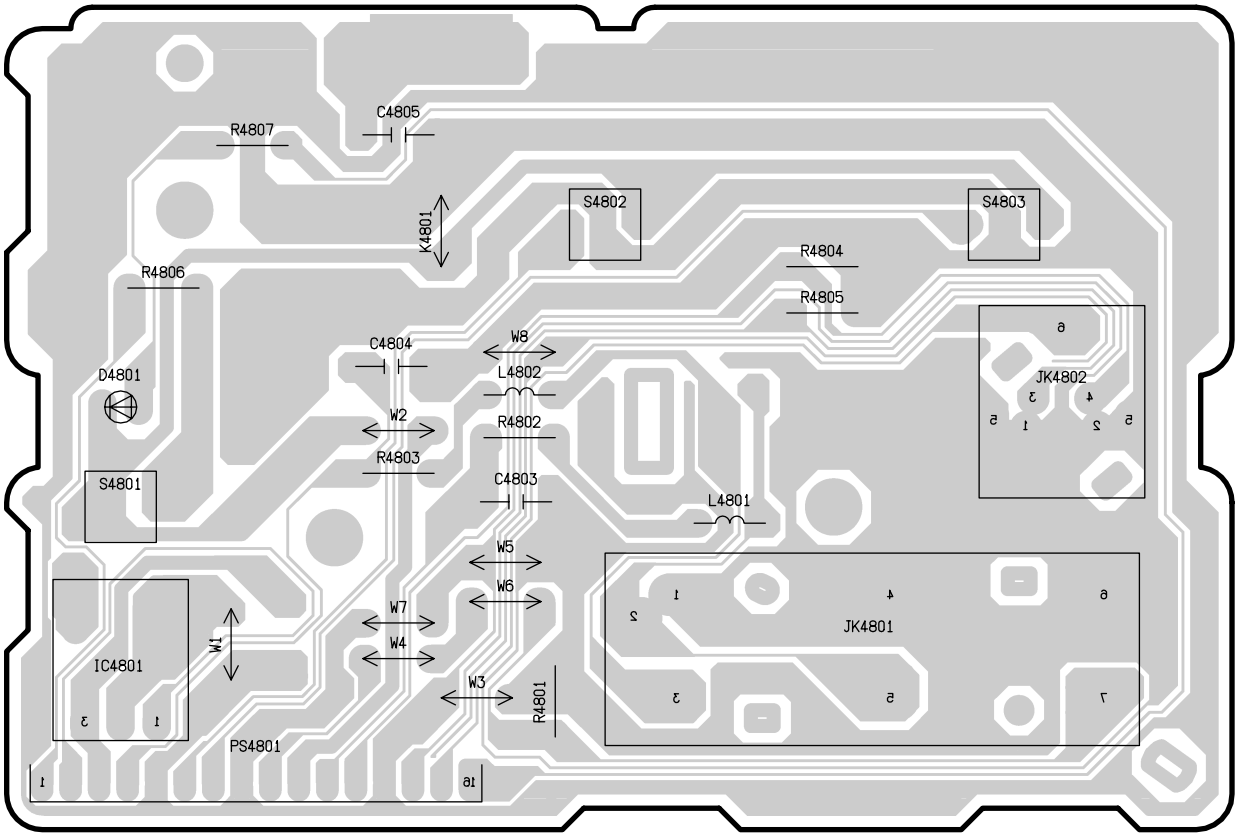


NV-HS930EG
DECODER PACK C.B.A.

FRONT C.B.A.	
Integrated Circuit	
IC4801	A-1
Connector	
PS4801	A-2

ADDRESS INFORMATION

(VEP04801A)

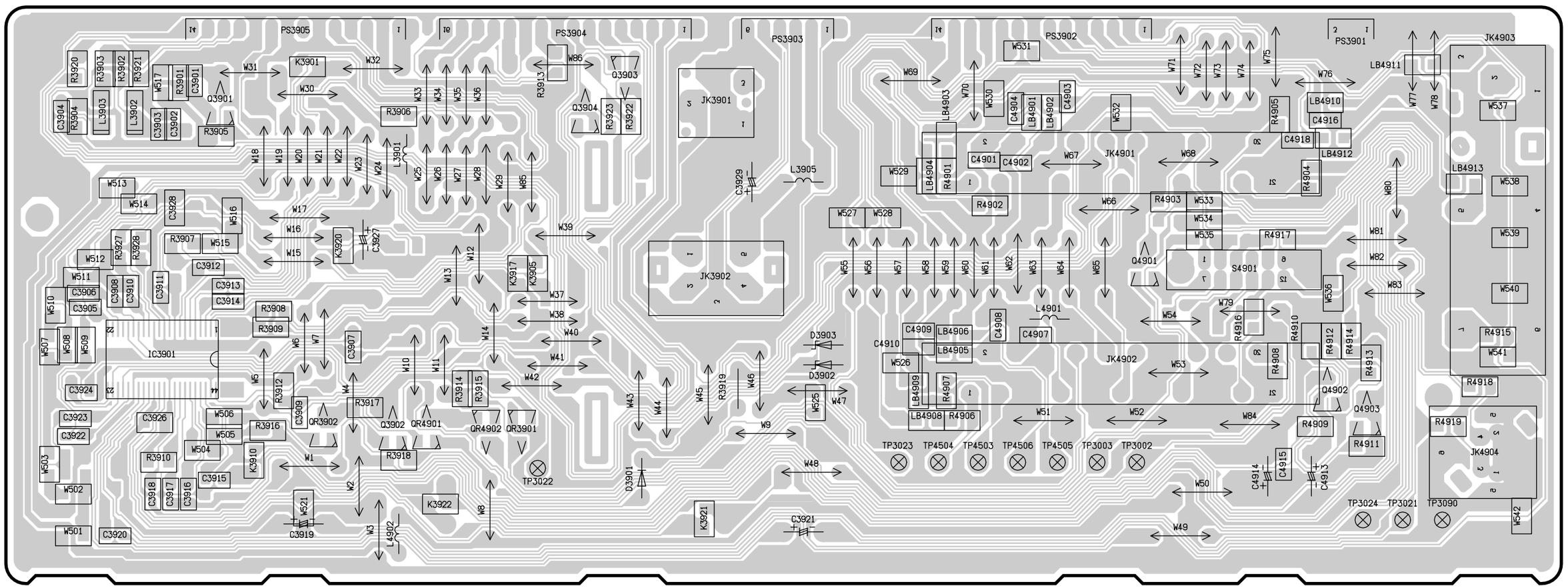


NV-HS930EG/B/EC/EE
FRONT C.B.A.

INPUT/OUTPUT PACK C.B.A.			
Transistor		**Test Point**	
Q3901	D-2	TP3002	B-7
Q3902	B-3	TP3003	B-7
Q3903	D-4	TP3021	A-9
Q3904	D-4	TP3022	B-4
Q4901	C-7	TP3023	B-6
Q4902	B-8	TP3024	A-8
Q4903	B-8	TP3090	A-9
Transistor & Resistor		TP4503	B-6
QR3901	B-4	TP4504	B-6
QR3902	B-3	TP4505	B-7
QR4901	B-3	TP4506	B-6
QR4902	B-4	**Connector**	
Integrated Circuit		PS3901	D-8
IC3901	B-2	PS3902	D-7
		PS3903	D-5
		PS3904	D-4
		PS3905	D-2

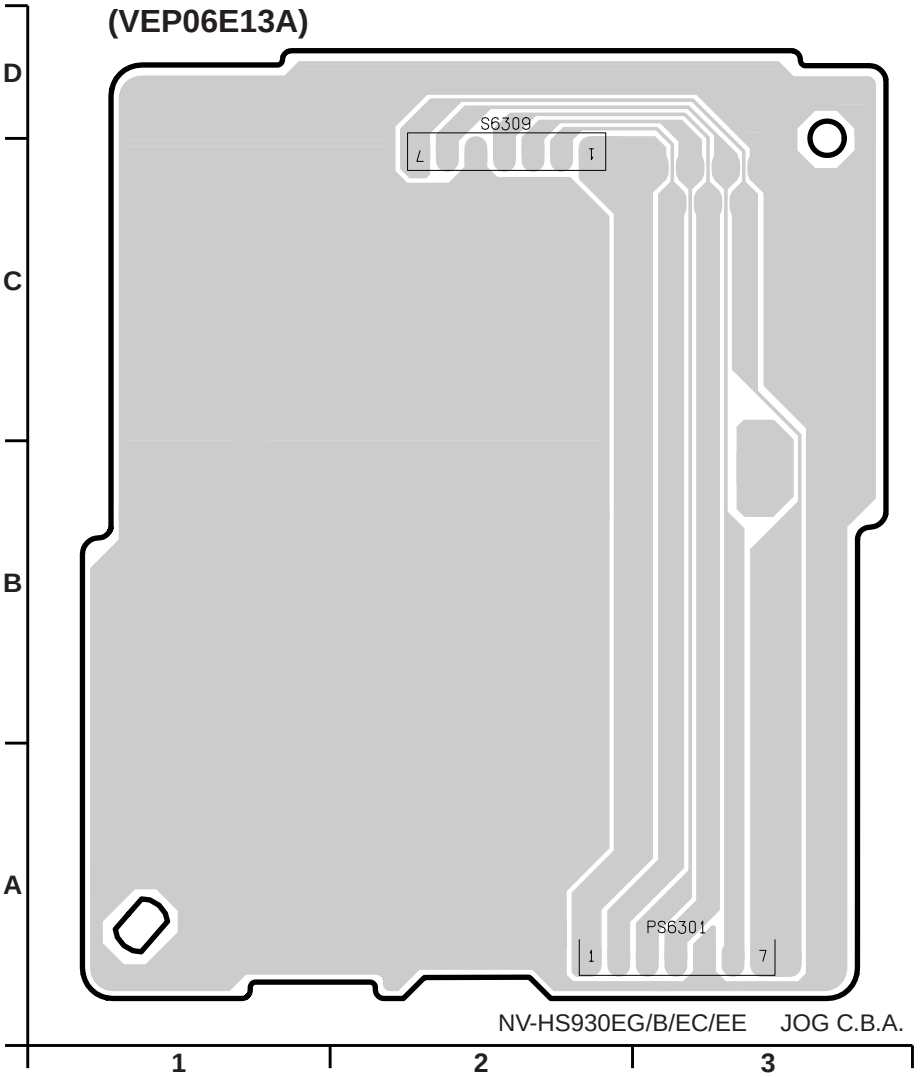
ADDRESS INFORMATION

(VEP03G10E)



NV-HS930EG/B/EC/EE
INPUT/OUTPUT PACK C.B.A.

(VEP06E13A)

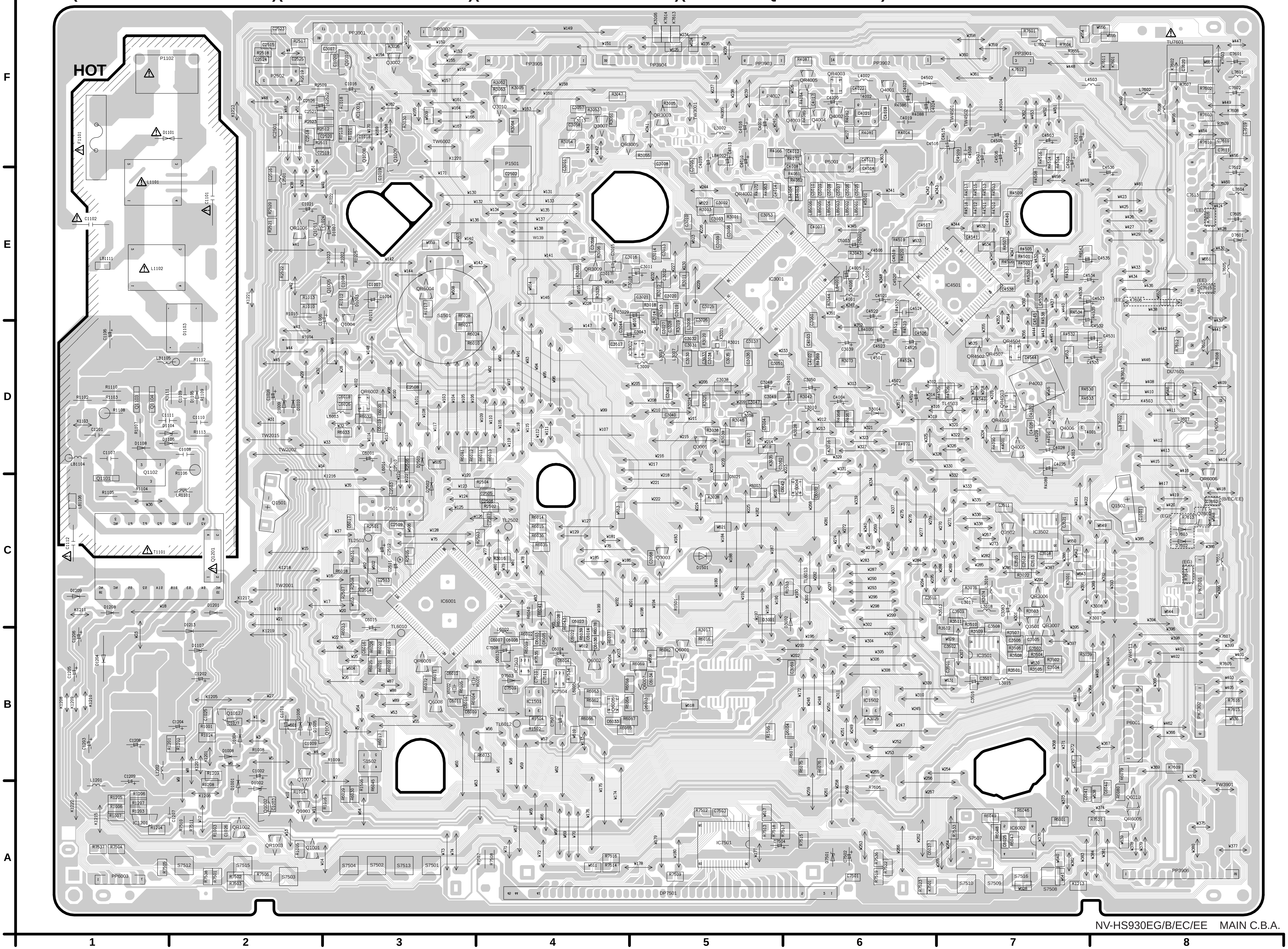


JOG C.B.A.	
Connector	
PS6301	A-3

ADDRESS INFORMATION

NV-HS930EG/B/EC/EE JOG C.B.A.

(VEP06E67F:NV-HS930EG)(VEP06E67G:NV-HS930B)(VEP06E67H:NV-HS930EC)(VEP06E67Q:NV-HS930EE)


HOT
F
E
D
C
B
A
1
2
3
4
5
6
7
8
IC3001
IC4501
IC6001
IC7501
IC3501
IC3502
IC6002
IC1501
IC1502
IC2501
IC1001
IC1201
TU7601
DU7601
P1102
P1501
P2501
P2502
P4002
P4003
P5001
P6001
P6004
PP3001
PP3002
PP3901
PP3902
PP3903
PP3904
PP3905
PP3906
PP6003
DP7501
PK7301
PK7302
T1101
T4001
S1501
S1502
Q1501
Q1502
D1501
(EG)
(EE)
(B/EC/EE)

NV-HS930EG/B/EC/EE MAIN C.B.A.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CAUTION

THE STRIPED FRAME INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

MAIN C.B.A.

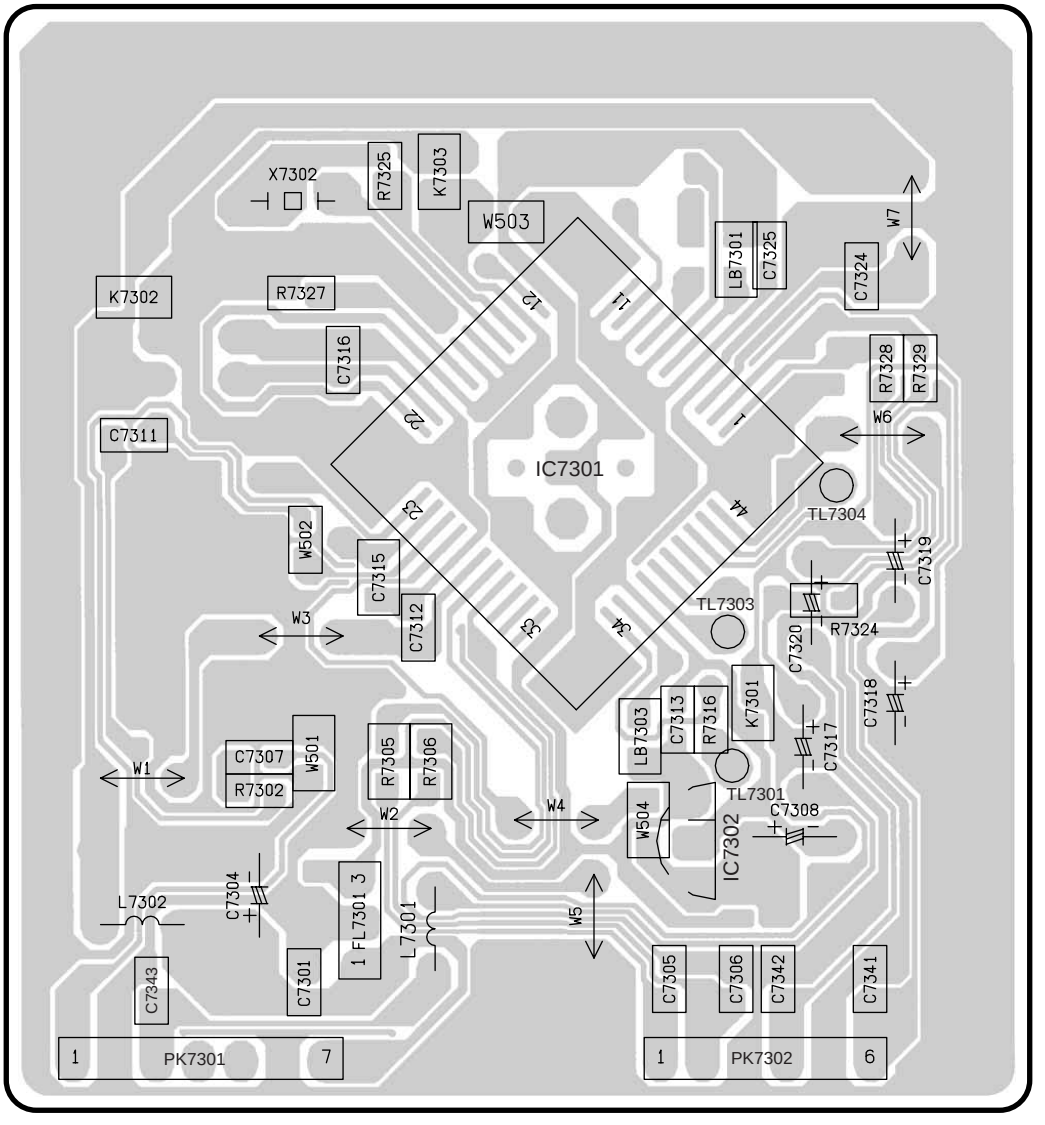
Transistor		**Transistor & Resistor**		**Test Point**	
Q1001	A-2	QR1002	A-2	TL2502	C-4
Q1002	A-2	QR1003	A-2	TL2503	C-3
Q1003	A-2	QR1006	E-2	TL4503	D-7
Q1004	D-3	QR3003	F-5	TL6010	B-3
Q1005	E-3	QR3005	F-4	TL6012	B-4
Q1006	B-3	QR3006	C-7	TL6013	C-6
Q1007	B-2	QR3007	C-7	TW2001	C-2
Q1008	F-3	QR3009	E-4	TW2002	D-2
Q1009	F-3	QR4002	E-5	TW2015	D-2
Q1010	F-3	QR4003	F-6	TW3001	F-5
Q1011	E-2	QR4005	F-6	TW3901	A-8
Q1012	B-2	QR4501	D-7	TW4501	F-7
Q1101	C-1	QR4502	D-7	TW4502	F-7
Q1102	D-1	QR4503	D-7	TW4511	B-8
Q1103	D-1	QR4504	D-7	TW6002	F-3
Q1104	D-1	QR4507	D-7	**Connector**	
Q1201	C-2	QR6001	B-3	P1102	F-1
Q1501	C-2	QR6002	D-3	P1501	F-4
Q1502	C-8	QR6004	E-3	P2501	C-3
Q3001	D-5	QR6005	A-8	P2502	F-2
Q3002	F-3	QR6006	C-8	P4002	F-5
Q3003	C-5	**Integrated Circuit**		P4003	D-7
Q3007	F-4	IC1001	F-3	P5001	F-6
Q3010	F-4	IC1201	A-1	P6001	B-8
Q3501	C-7	IC1501	B-4	P6004	D-8
Q3502	C-7	IC1502	B-6	PK7301	C-8
Q4001	F-6	IC2501	F-2	PK7302	B-8
Q4002	F-6	IC3001	E-5	PP3001	F-3
Q4003	F-6	IC3002	D-5	PP3002	F-3
Q4004	F-6	IC3501	B-7	PP3901	F-7
Q4005	D-7	IC3502	C-7	PP3902	F-6
Q4006	D-7	IC4501	E-7	PP3903	F-5
Q6001	B-5	IC6001	C-3	PP3904	F-5
Q6002	B-4	IC6002	A-7	PP3905	F-4
Q6005	B-4	IC6004	C-6	PP3906	A-8
Q6007	B-5	IC7501	A-5	PP6003	A-1
Q6008	B-3	IC7503	B-4	DU7601	D-8
Q6010	A-8	IC7504	B-4	TU7601	F-8
Q7601	C-8				

ADDRESS INFORMATION

NICAM DECODER PACK C.B.A.	
Integrated Circuit	
IC7301	B-2
IC7302	A-2
Test Point	
TL7301	A-2
TL7303	B-2
TL7304	B-2
Integrated Circuit	
PK7301	A-1
PK7302	A-2

ADDRESS INFORMATION

(VEP07A18X:NV-HS930B)
(VEP07A18R:NV-HS930EC)
(VEP07A18T:NV-HS930EE)

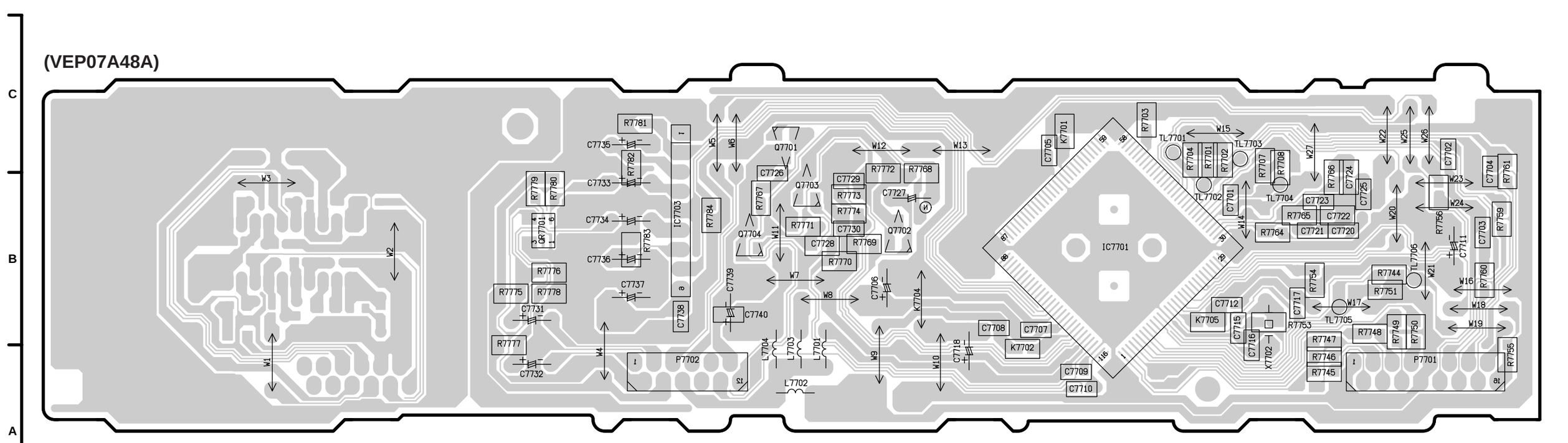


NV-HS930B/EC/EE
NICAM DECODER PACK C.B.A.

OSD/CNR C.B.A.			
Transistor		**Test Point**	
Q7701	C-5	TL7701	C-7
Q7702	B-6	TL7702	B-7
Q7703	B-5	TL7703	C-8
Q7704	B-5	TL7704	B-8
Transistor & Resistor		TL7705	B-8
QR7701	B-4	TL7706	B-9
Integrated Circuit		**Connector**	
IC7701	B-7	P7701	A-9
IC7703	B-4	P7702	A-4

ADDRESS INFORMATION

(VEP07A48A)

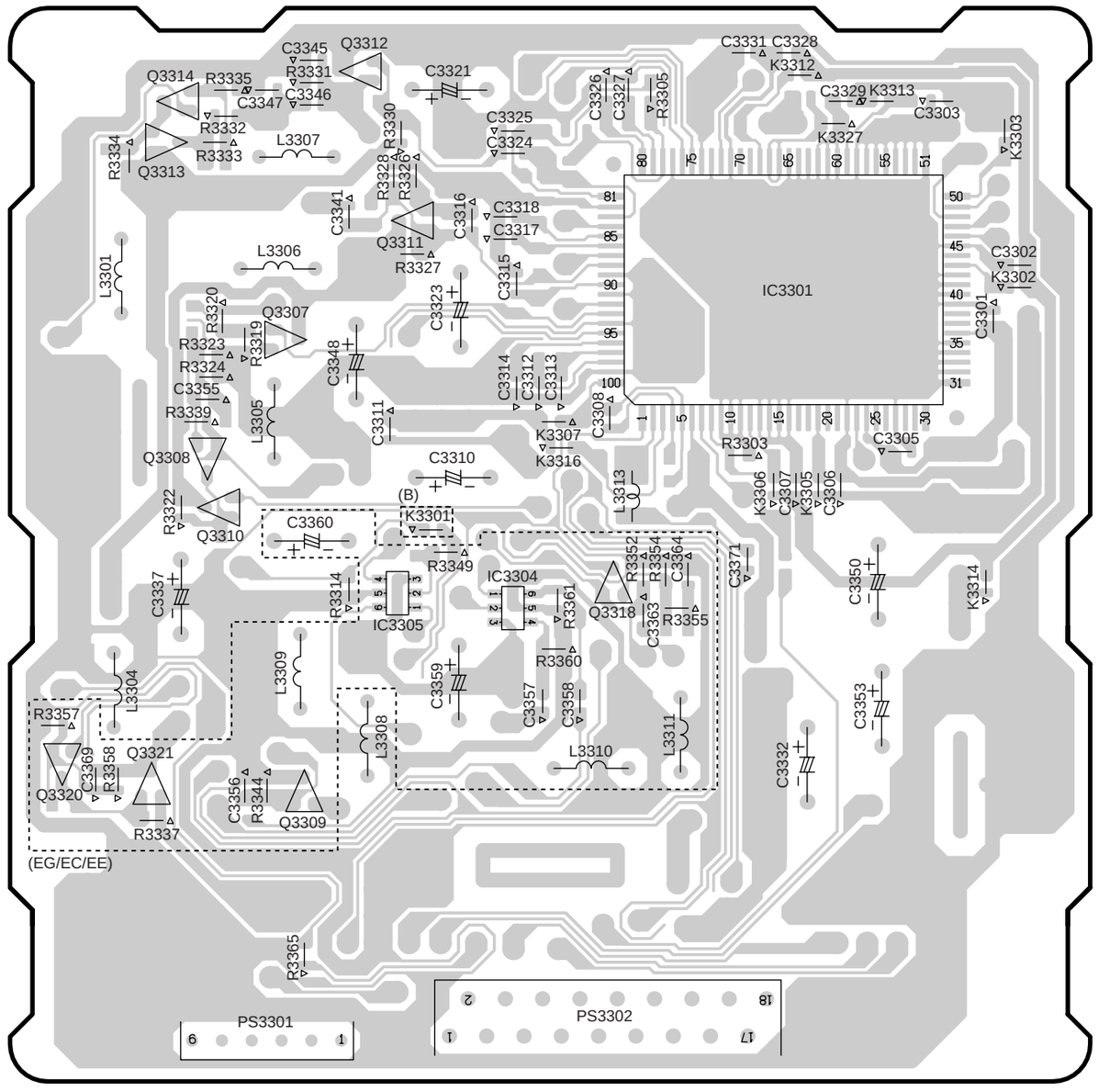


NV-HS930EG/B/EC/EE
OSD/CNR C.B.A.

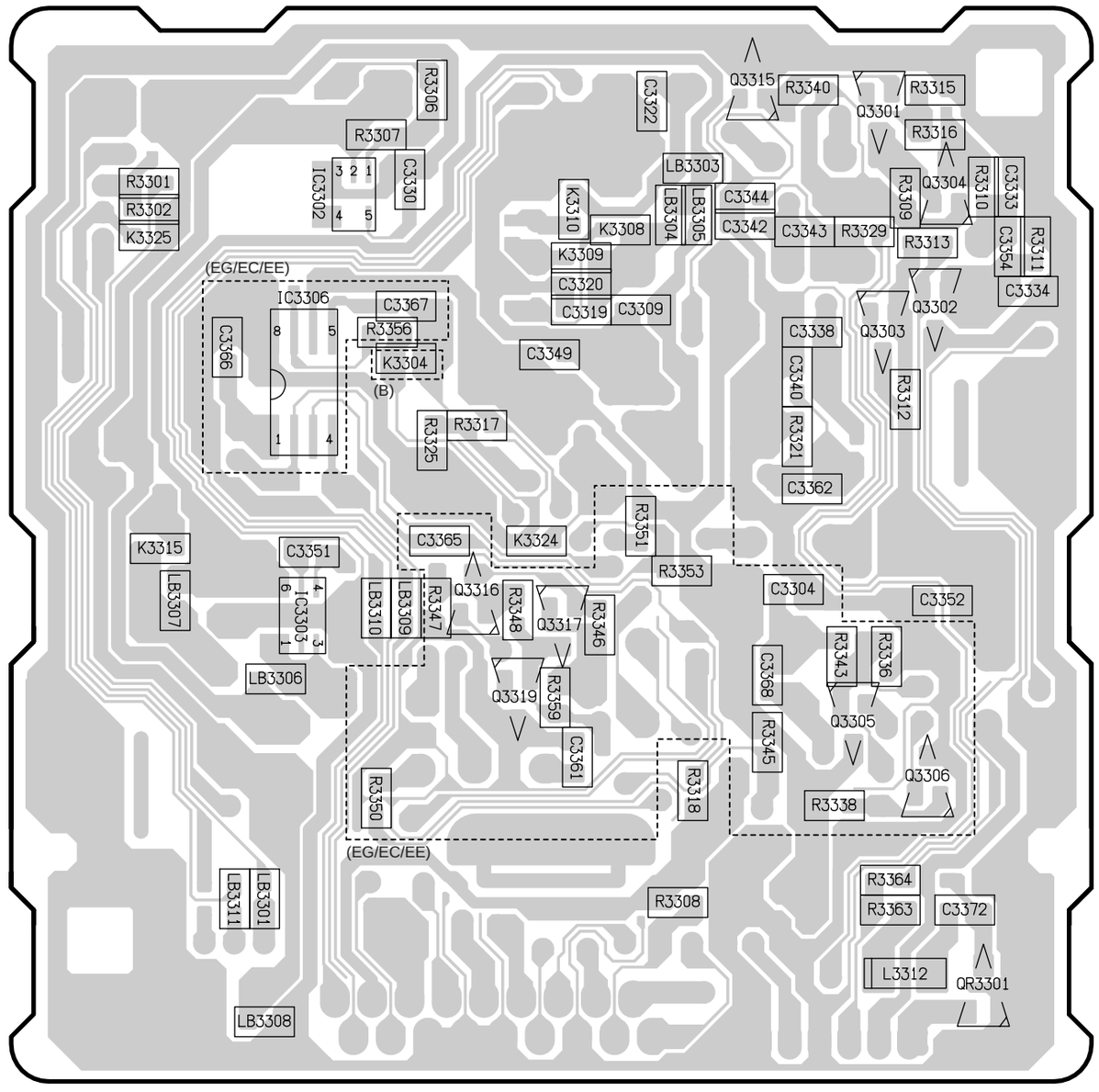
TBC/DNR PACK C.B.A.					
Transistor		Q3312	E-2	**Transistor & Resistor**	
Q3301	E-8	Q3313	E-1	QR3301	A-9
Q3302	D-9	Q3314	E-1	**Integrated Circuit**	
Q3303	D-8	Q3315	E-8	IC3301	D-4
Q3304	D-9	Q3316	C-7	IC3302	D-6
Q3305	B-8	Q3317	C-7	IC3303	C-6
Q3306	B-9	Q3318	C-3	IC3304	C-3
Q3307	D-2	Q3319	B-7	IC3305	C-2
Q3308	C-1	Q3320	B-1	IC3306	D-6
Q3309	B-2	Q3321	B-1	**Connector**	
Q3310	C-1			PS3301	A-2
Q3311	D-2			PS3302	A-3

ADDRESS INFORMATION

(VEP03G11A:NV-HS930EG/EC/EE)(VEP03G11B:NV-HS930B)



(COMPONENT SIDE)



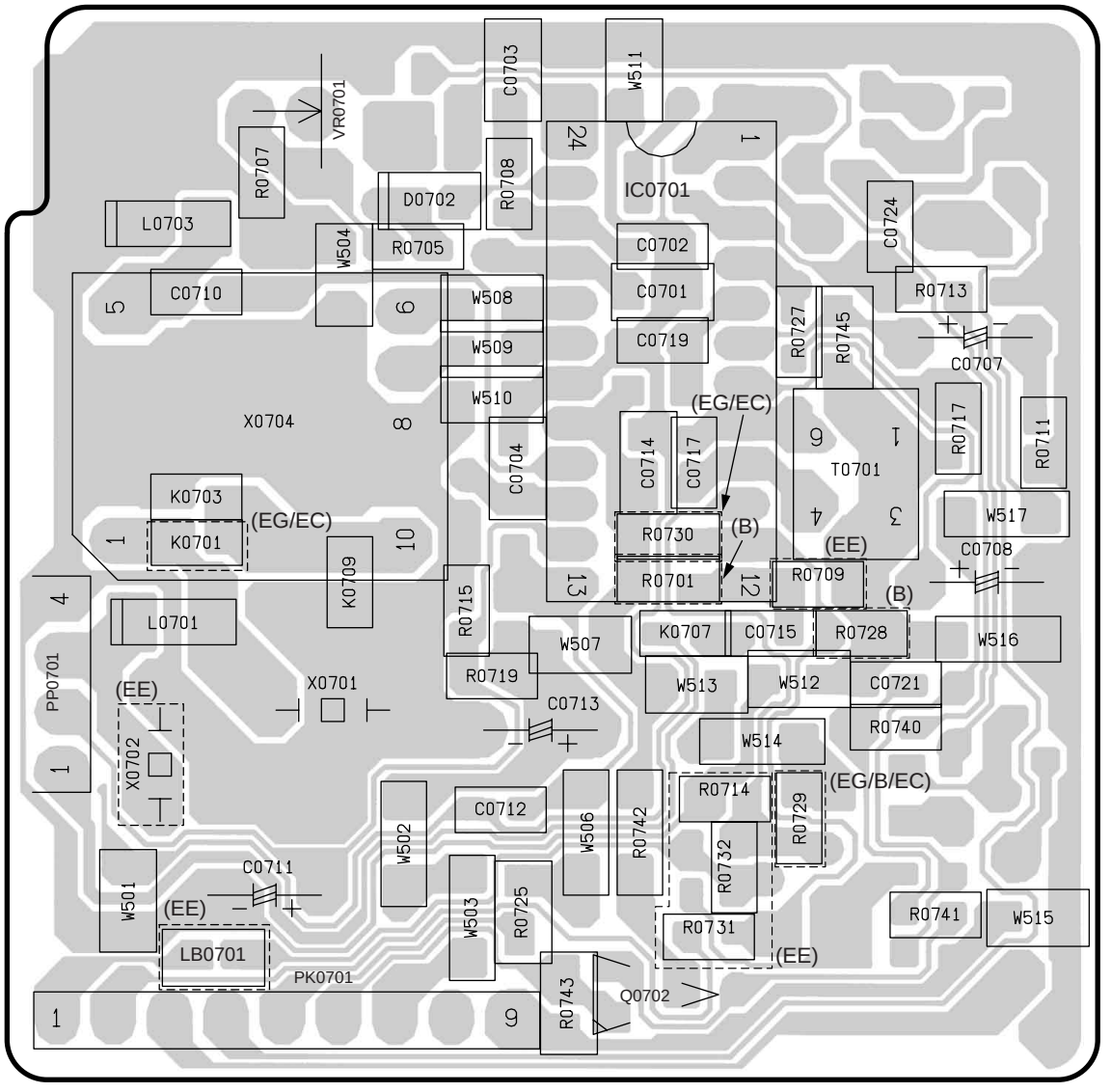
(FOIL SIDE)

NV-HS930EG/B/EC/EE
TBC/DNR PACK C.B.A.

TV DEMODULATOR PACK C.B.A.	
Transistor	
Q0702	A-3
Integrated Circuit	
IC0701	C-2
Adjustment	
T0701	B-3
VR0701	D-2
Connector	
PK0701	A-2
PP0701	B-1

ADDRESS INFORMATION

(VEP07A23S:NV-HS930EG/EC)
(VEP07A23T:NV-HS930B)
(VEP07A23U:NV-HS930EE)



NV-HS930EG/B/EC/EE
TV DEMODURATOR PACK C.B.A.

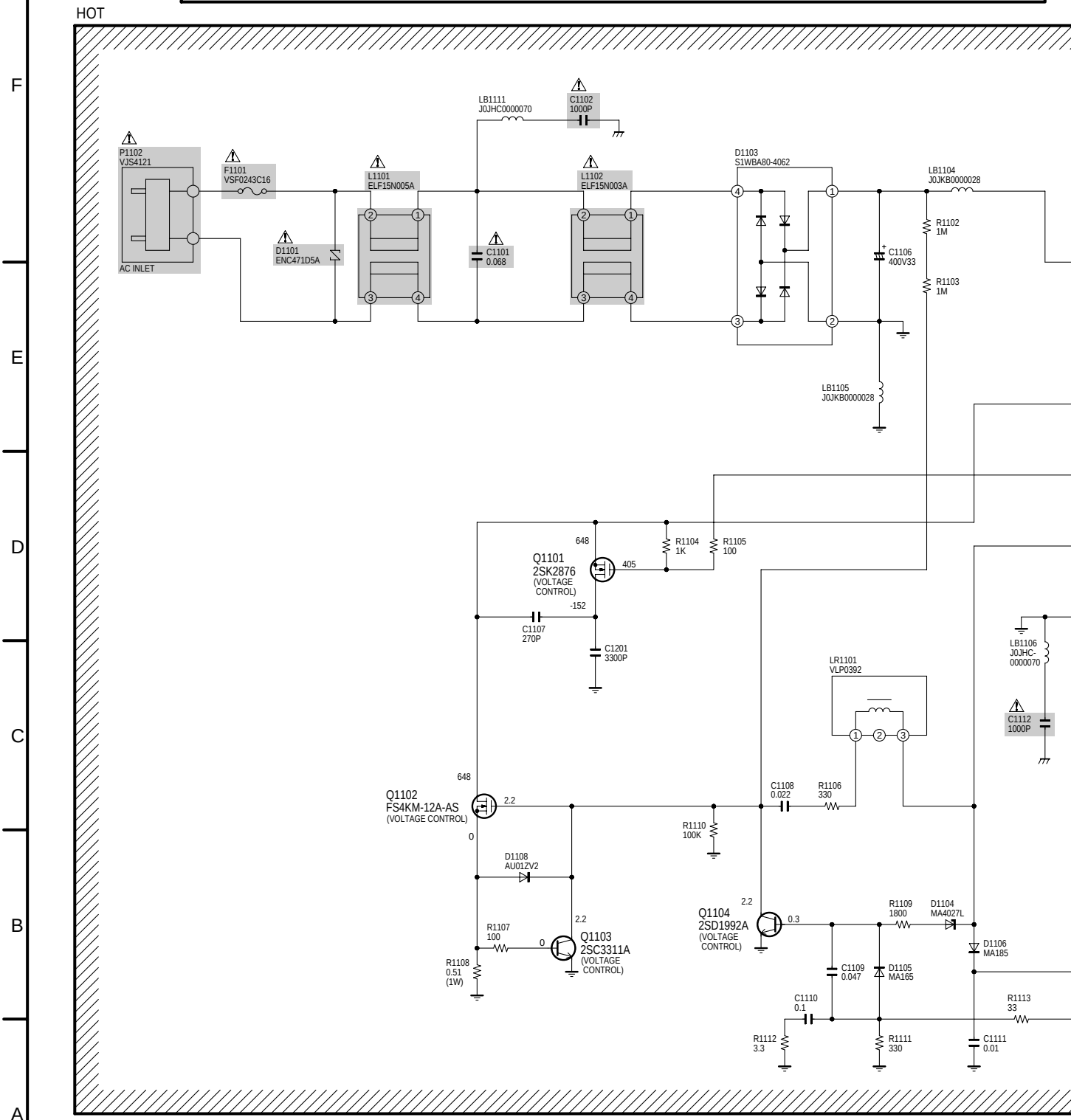
8 SCHEMATIC DIAGRAMS

8.1. POWER TRANSFORMER SECTION IN MAIN SCHEMATIC DIAGRAM

CAUTION

THE STRIPED FRAME INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.

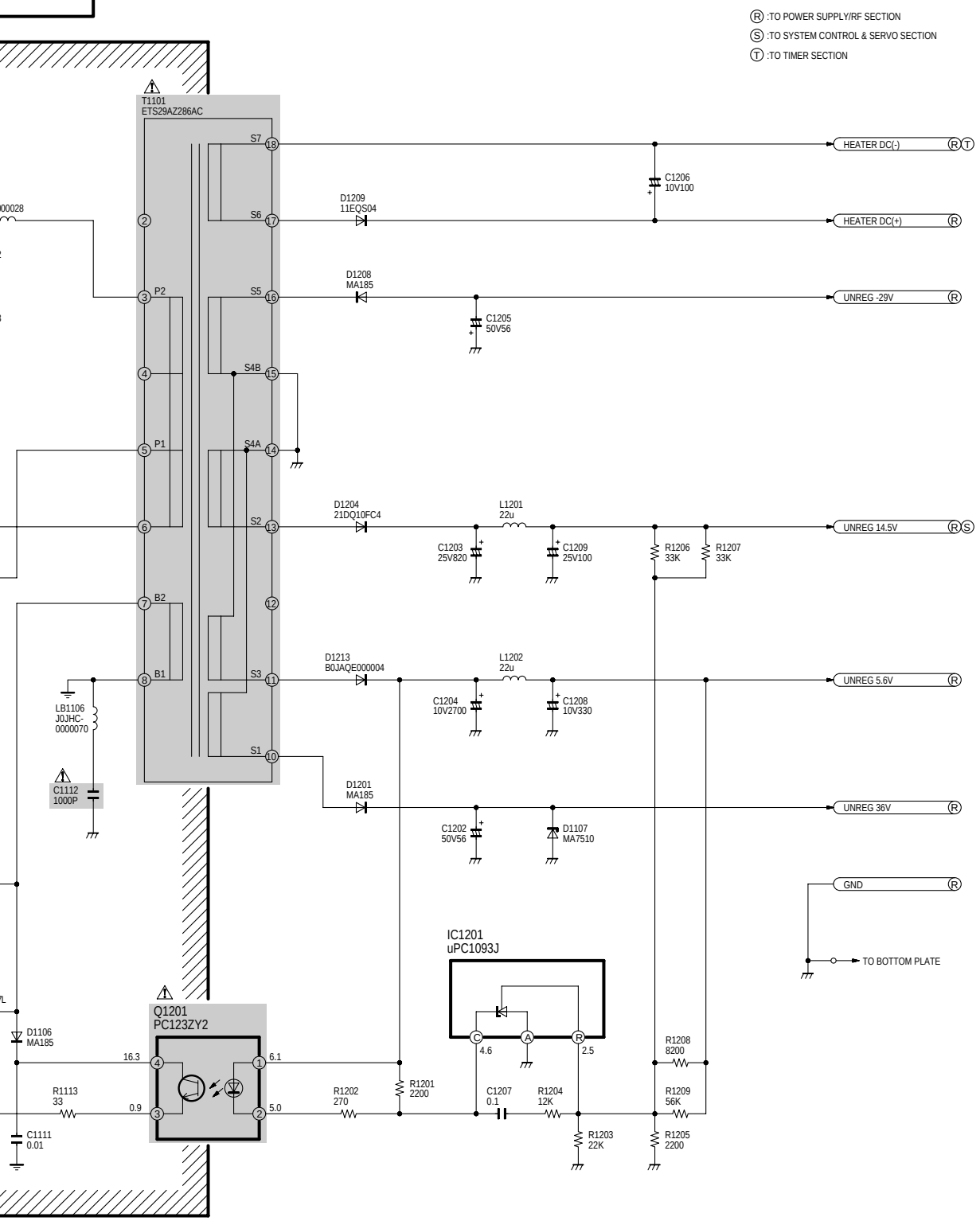
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,USE ONLY THE SAME TYPE.

NOTE1:WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT,SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE..... ⏚
SECONDARY SIDE... ⏚

NOTE2:THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.



TRANSFORMER
LOWS.

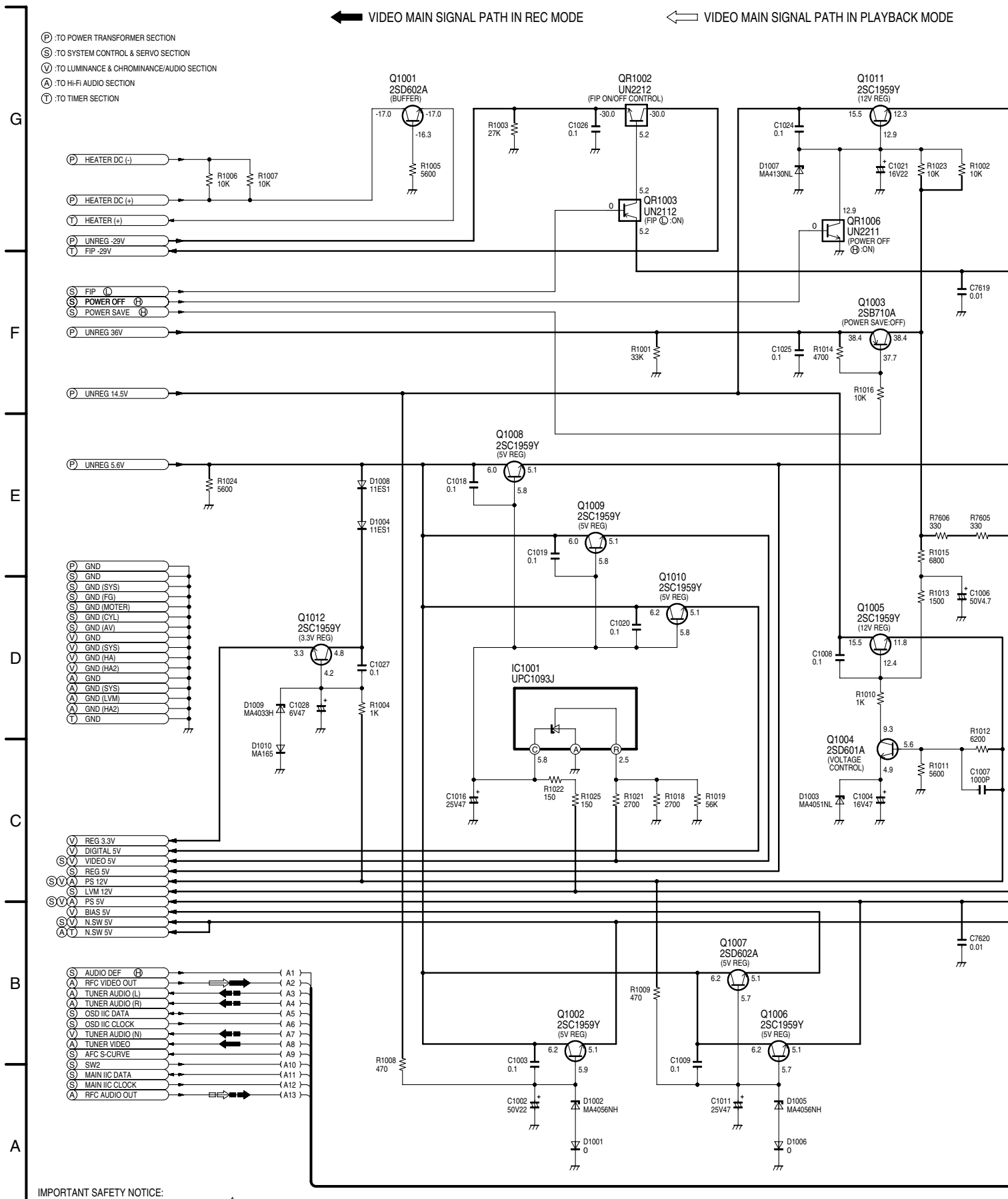
OLTAGE WHEN

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.
NOTE:THE MEASURMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-HS930EG/B/EC/EE
POWER TRANSFORMER
SECTION SCHEMATIC DIAGRAM

6 7 8 9 10

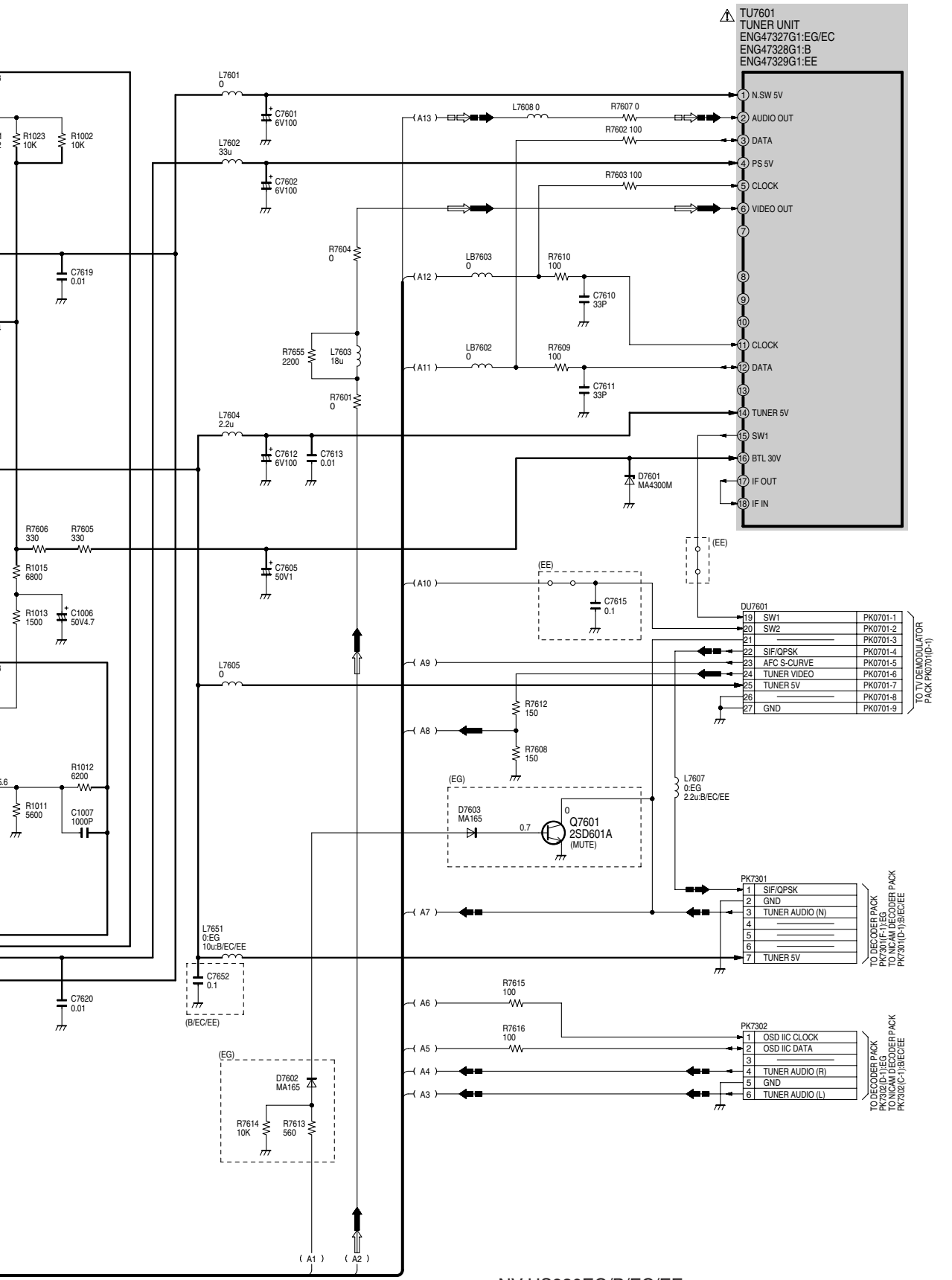
8.2. POWER SUPPLY/ RF SECTION IN MAIN SCHEMATIC DIAGRAM



CK MODE

AUDIO MAIN SIGNAL PATH IN REC MODE

AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



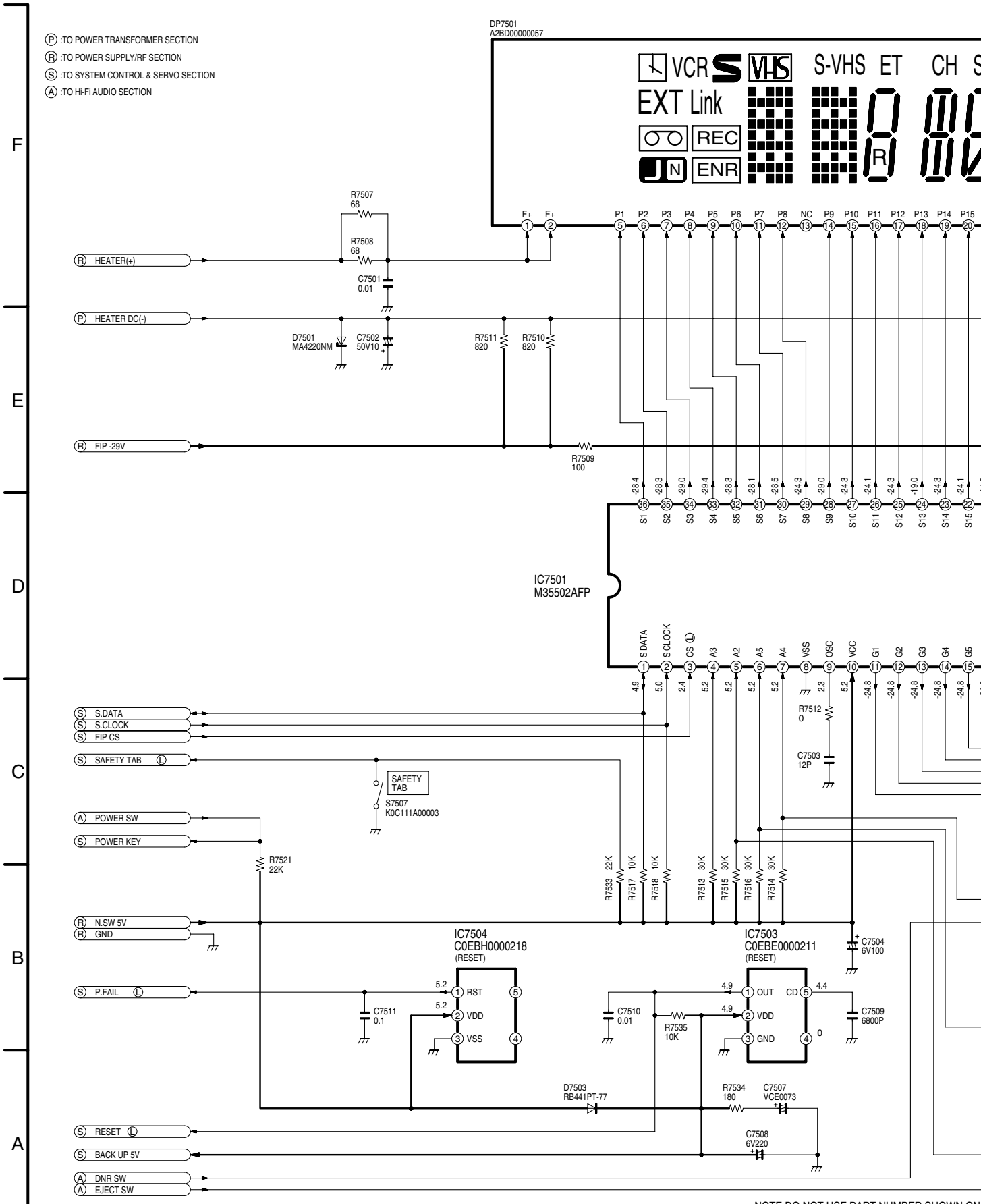
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

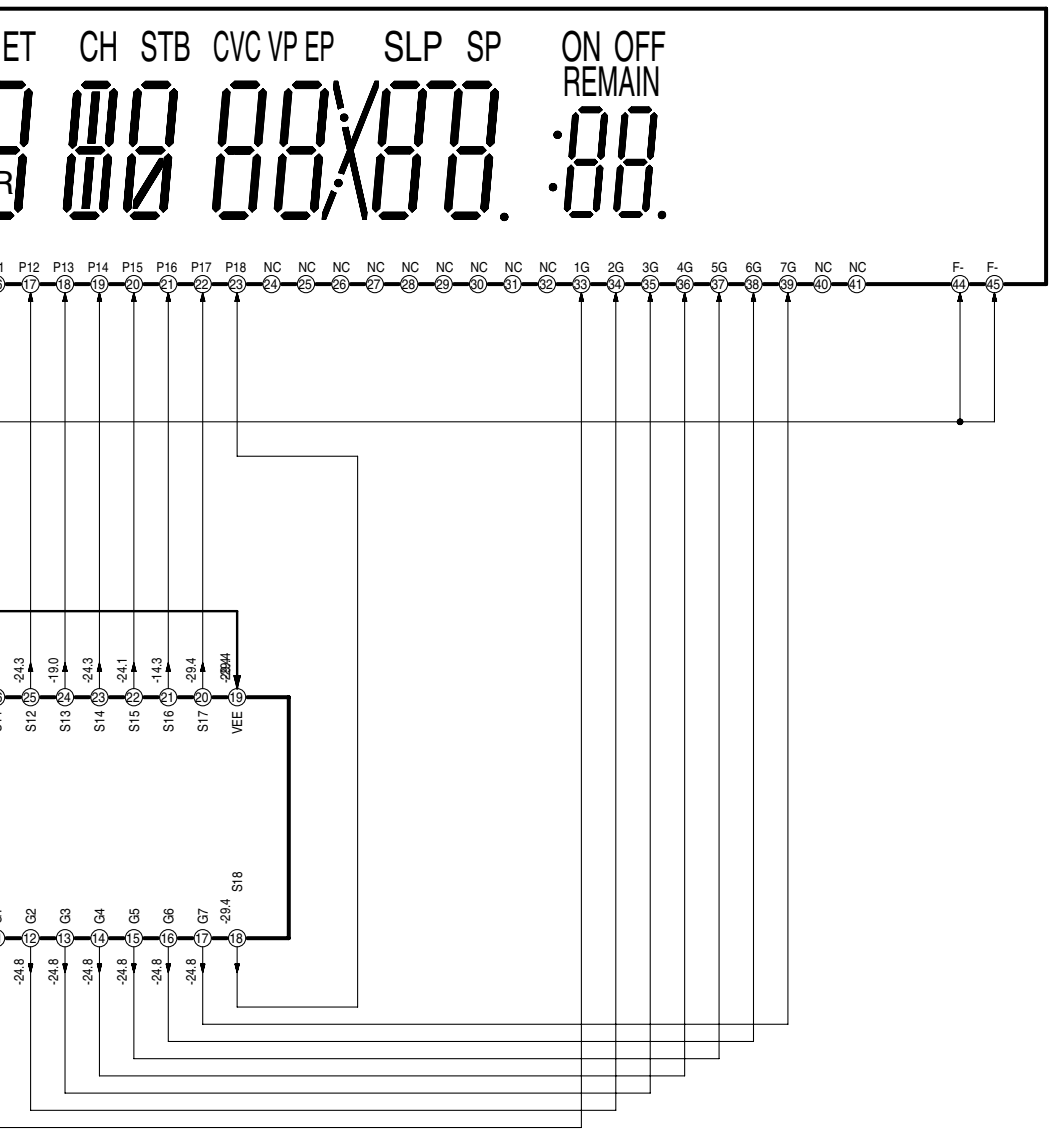
P MODE.

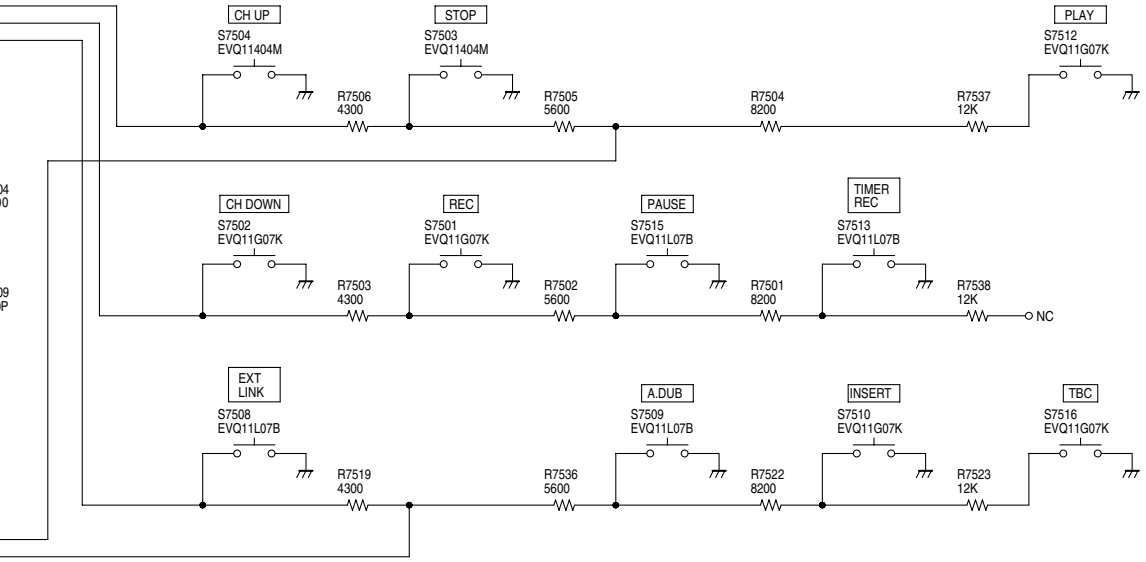
NV-HS930EG/B/EC/EE
POWER SUPPLY/RF SECTION SCHEMATIC DIAGRAM

6 | 7 | 8 | 9 | 10

8.3. TIMER SECTION IN MAIN SCHEMATIC DIAGRAM




ET CH STB CVC VP EP SLP SP
ON OFF
REMAIN
P12 P13 P14 P15 P16 P17 P18 NC NC NC NC NC NC NC NC NC 1G 2G 3G 4G 5G 6G 7G NC NC F- F-
S12 S13 S14 S15 S16 S17 VEE
G2 G3 G4 G5 G6 G7 S18

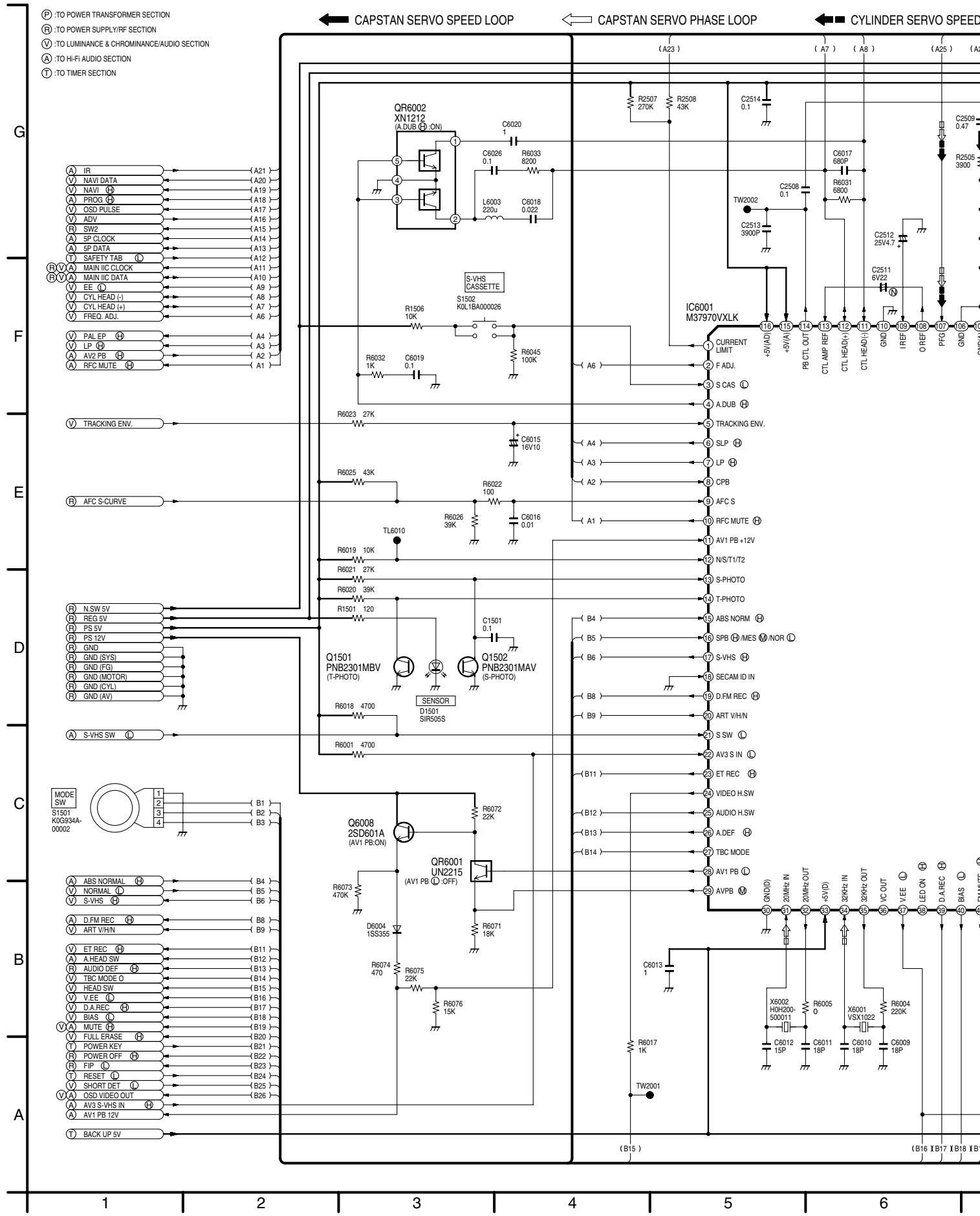


NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR
YOU ORDER A PART,PLESE REFER TO PARTS LIST.

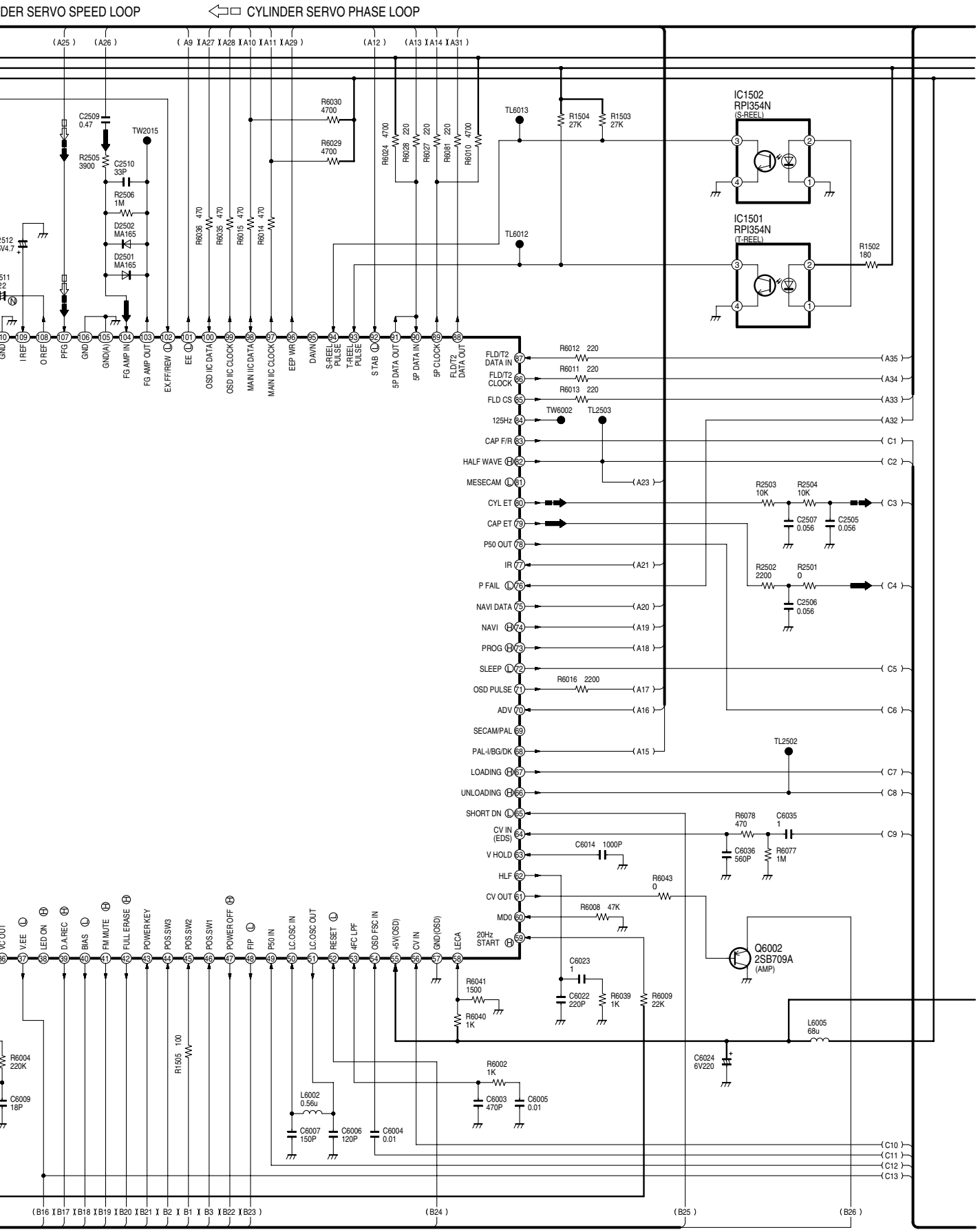
NV-HS930EG/B/EC/EE
TIMER SECTION SCHEMATIC DIAGRAM

6 7 8 9

8.4. SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM

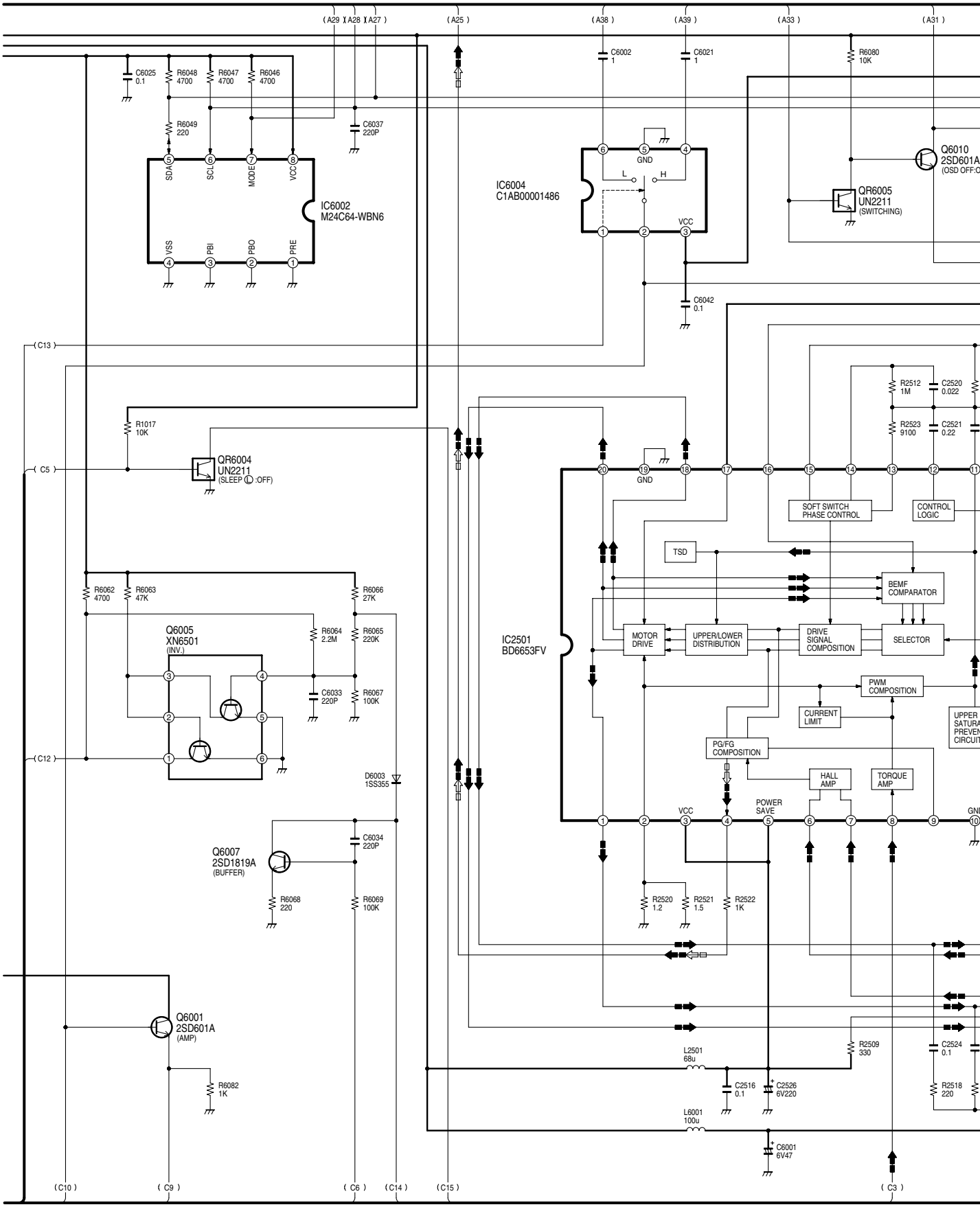


AM



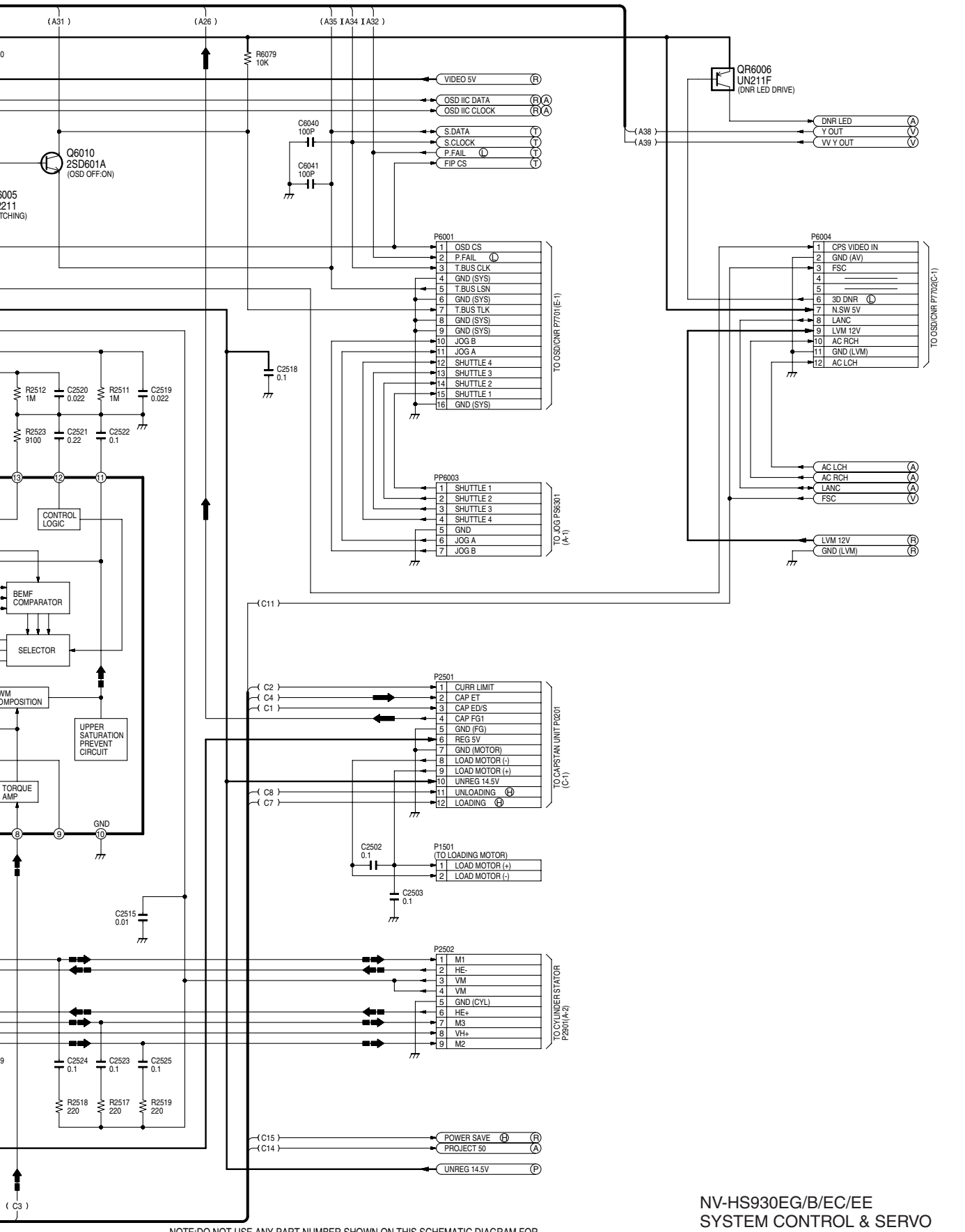
NV-HS930EG/B/EC/EE SYSTEM CONTROL & SERVO SECTION SCHEMATIC DIAGRAM

6 | 7 | 8 | 9 | 10 | 11 | 12



NV-HS930EG/B/EC/EE SYSTEM CONTROL & SERVO SECTION SCHEMATIC DIAGRAM

12 | 13 | 14 | 15 | 16 | 17

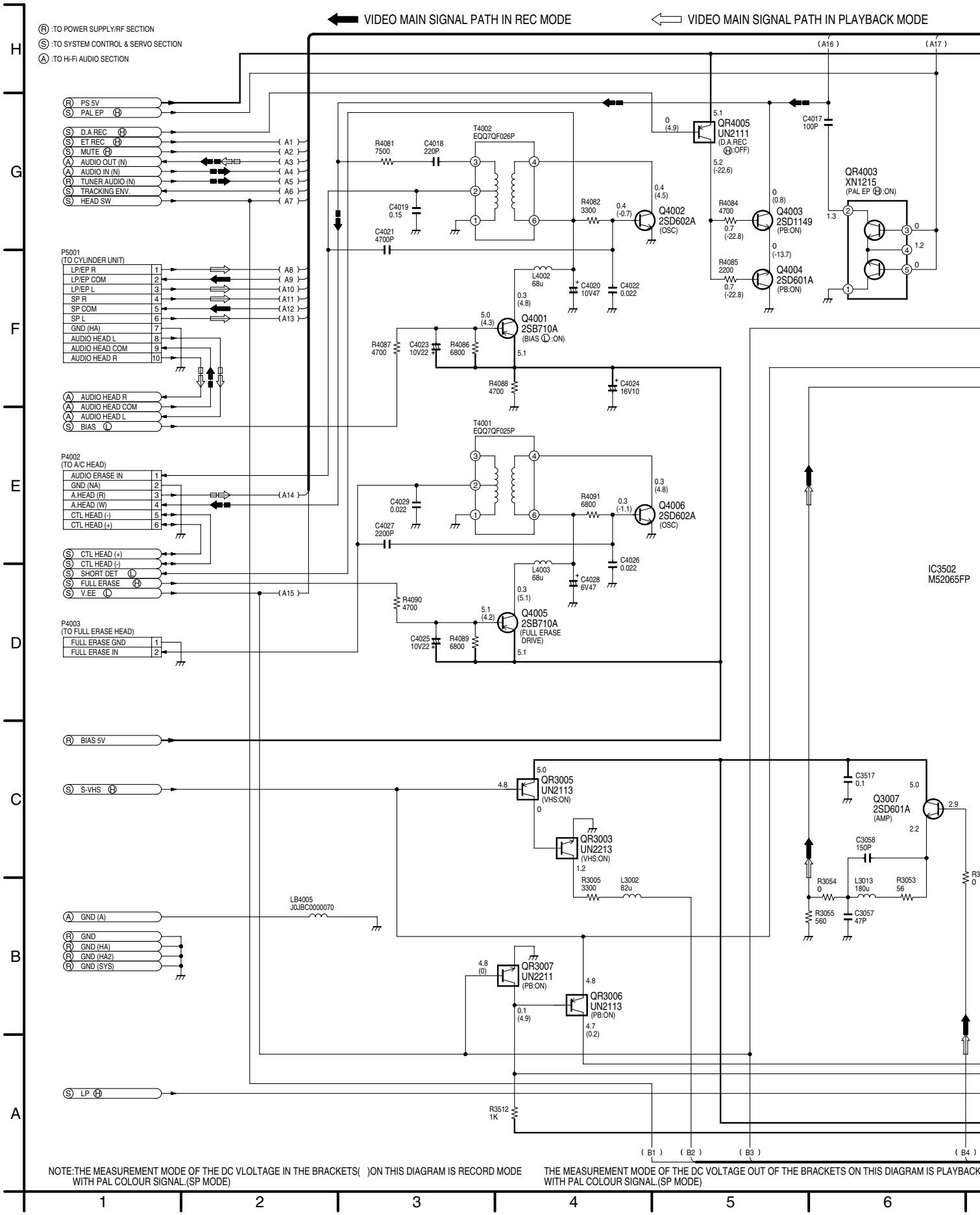


NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
SYSTEM CONTROL & SERVO
SECTION SCHEMATIC DIAGRAM

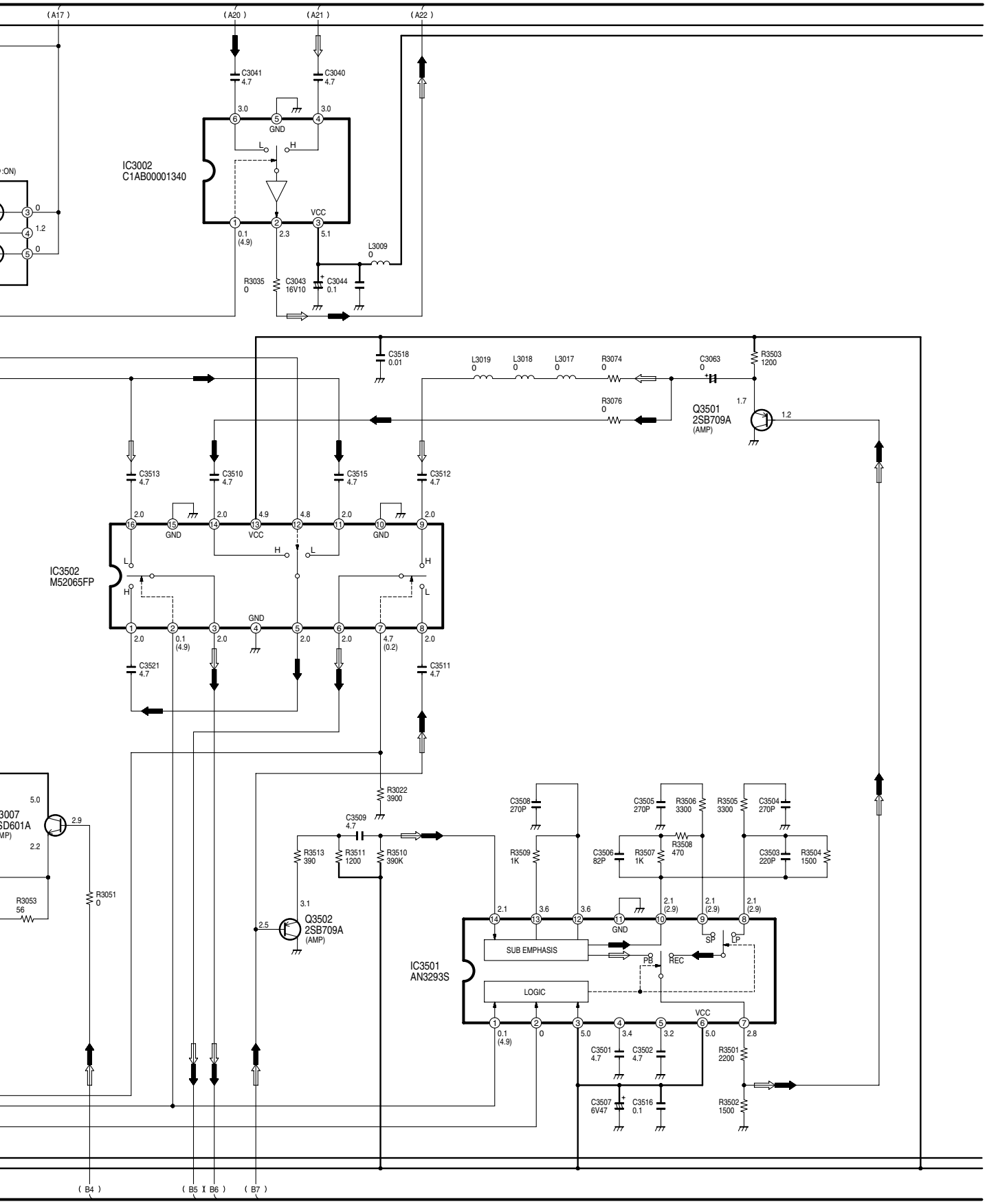
18 19 20 21 22

8.5. LUMINANCE & CHROMINANCE/ AUDIO SECTION IN MAIN SCHEMATIC DIAGR



C DIAGRAM

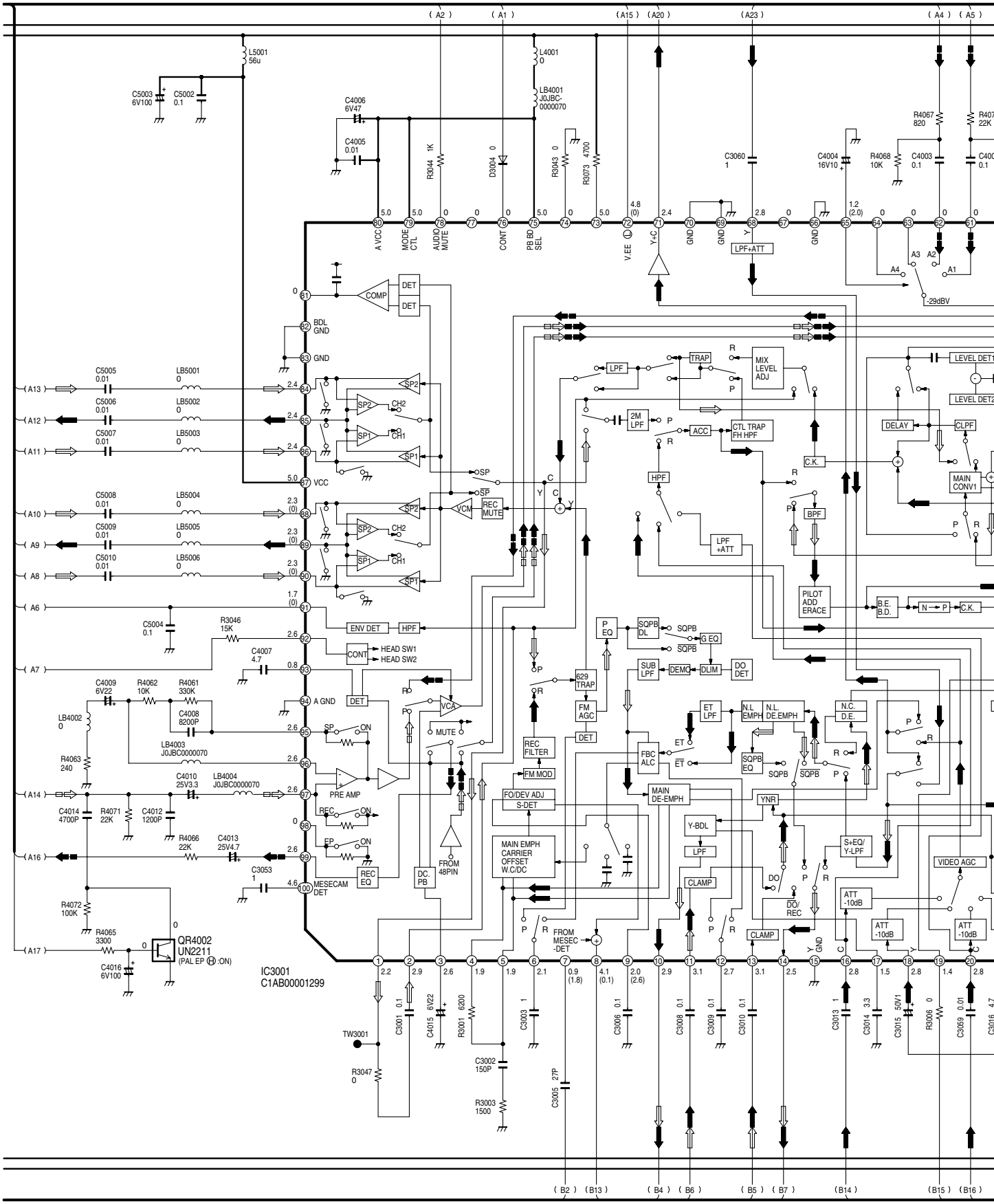
CK MODE ◀■■ AUDIO MAIN SIGNAL PATH IN REC MODE ◁□□ AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

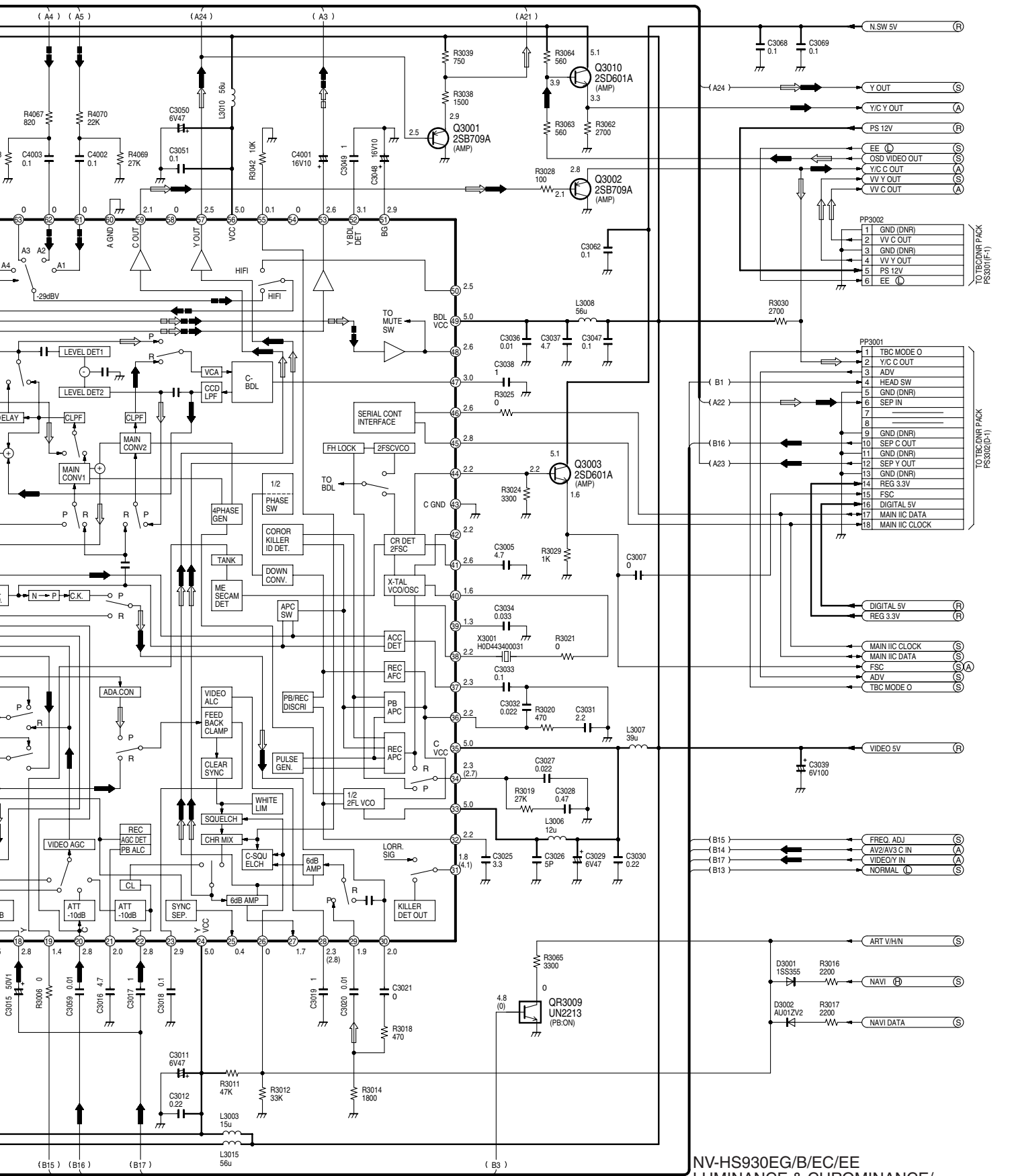


S DIAGRAM IS PLAYBACK MODE

NV-HS930EG/B/EC/EE LUMINANCE & CHROMINANCE/AUDIO SECTION SCHEMATIC DIAGRAM

6 | 7 | 8 | 9 | 10 | 11 | 12


IC3001
C1AB00001299
QR4002
UN2211
(PAL EP Ⓗ:ON)
TW3001
A VCC
MODE CTL
AUDIO MUTE
CONT
PB BD SEL
V.EE
Y+C
GND
Y
LPF+ATT
-29dBV
VCC
BDL GND
GND
A GND
HEAD SW1
HEAD SW2
MESECAM DET
FROM 48PIN
FROM MESEC -DET
DC. PB
REC EQ
PRE AMP
MUTE
VCA
VCM
REC MUTE
ENV DET
HPF
LPF
TRAP
MIX LEVEL ADJ
2M LPF
ACC
CTL TRAP FH HPF
C.K.
LPF +ATT
BPF
PILOT ADD ERACE
B.E. B.D.
N → P
DELAY
CLPF
MAIN CONV1
LEVEL DET1
LEVEL DET2
P EQ
SQPB DL
G EQ
SUB LPF
DEMO
DLIM
DO DET
629 TRAP
FM AGC
DET
REC FILTER
FM MOD
FO/DEV ADJ
S-DET
MAIN EMPH CARRIER OFFSET W.C/DC
FBC ALC
ET LPF
N.L. EMPH
N.L. DE.EMPH
SQPB EQ
MAIN DE-EMPH
YNR
Y-BDL
LPF
CLAMP
S+EQ/ Y-LPF
VIDEO AGC
ATT -10dB
DO/ REC
N.C.
D.E.

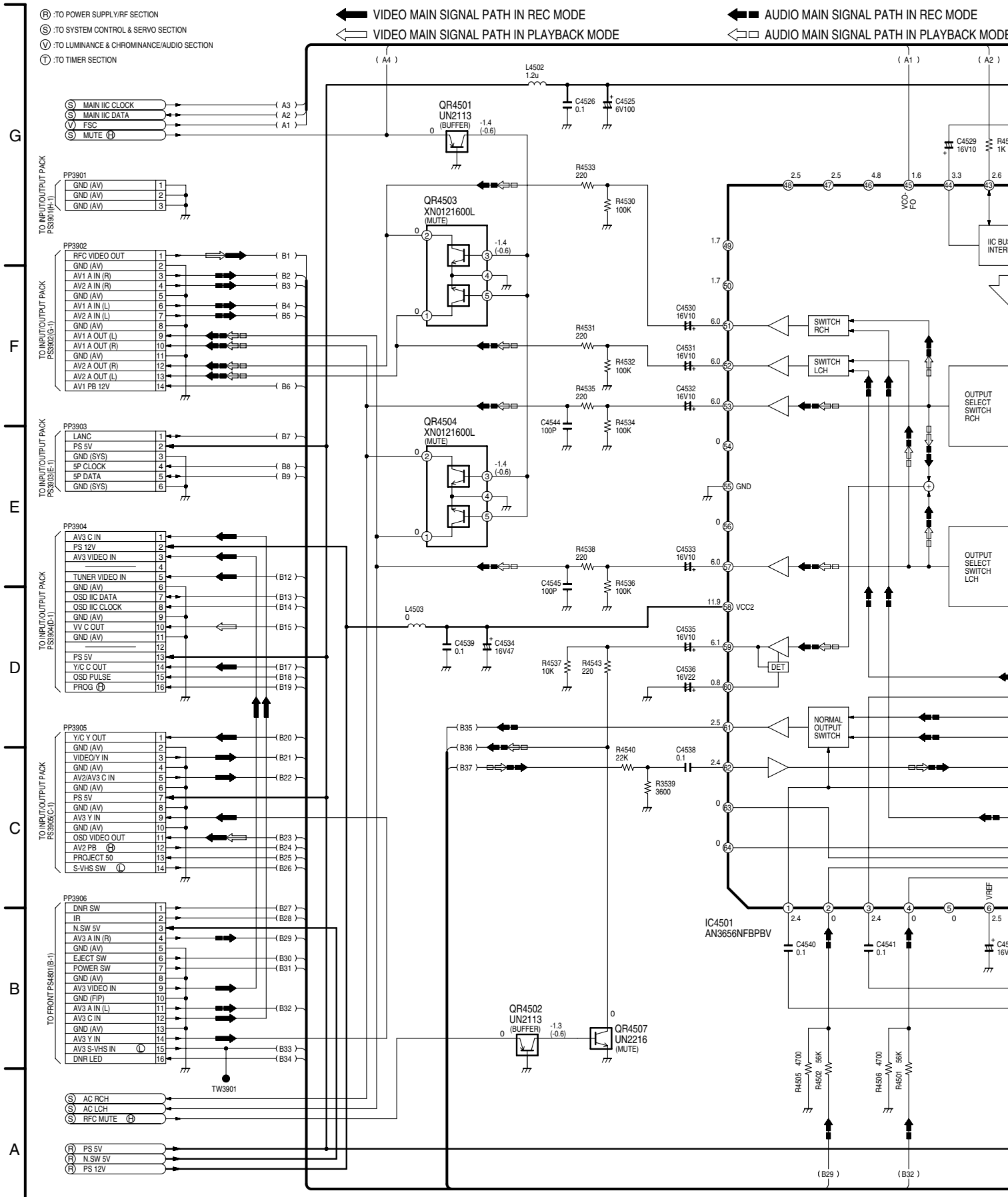


NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
LUMINANCE & CHROMINANCE/
AUDIO SECTION SCHEMATIC DIAGRAM

18 | 19 | 20 | 21 | 22 | 23

8.6. Hi-Fi AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

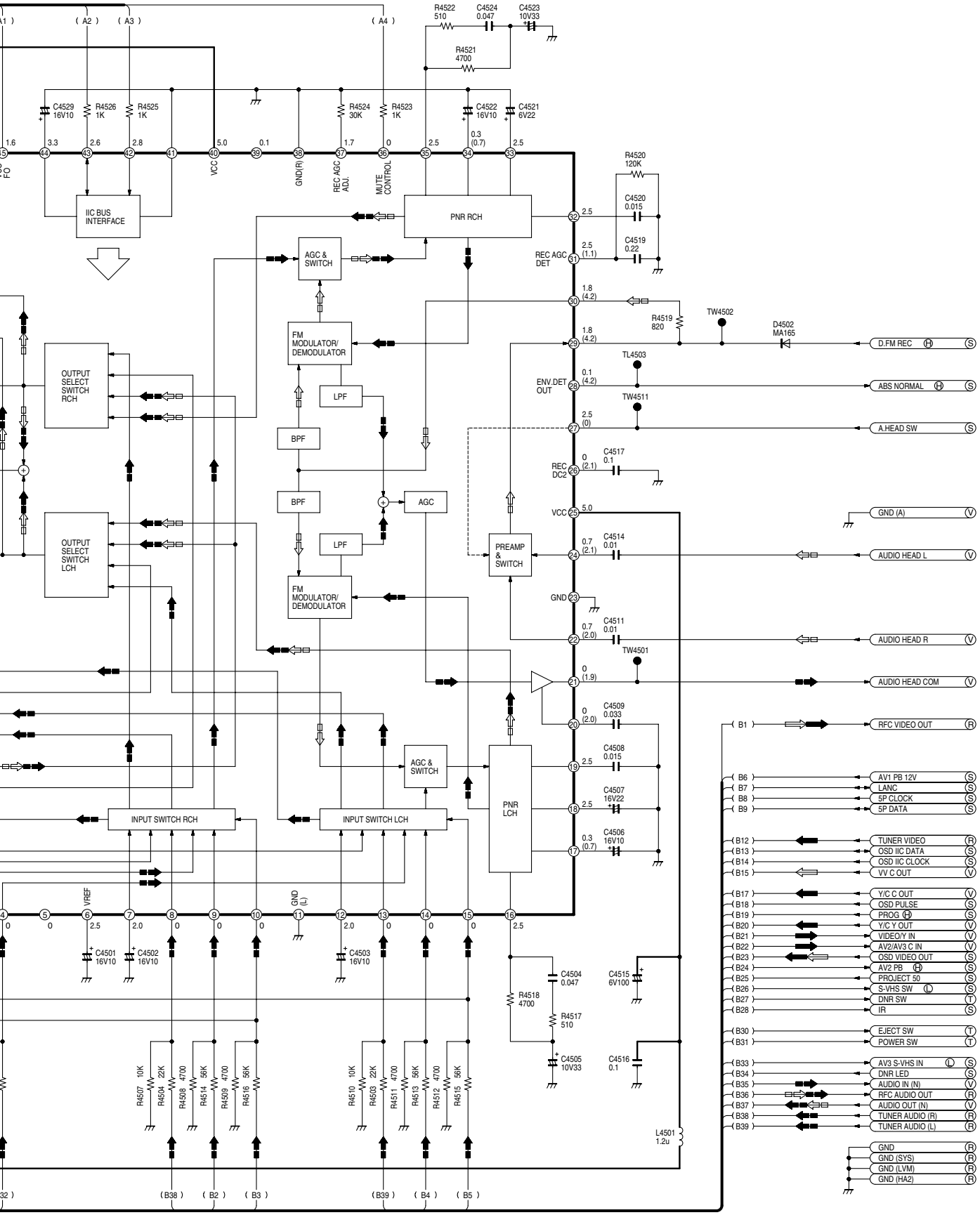


NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBAC WITH PAL COLOUR SIGNAL.(SP MODE)

IN REC MODE

IN PLAYBACK MODE



IS DIAGRAM IS PLAYBACK MODE

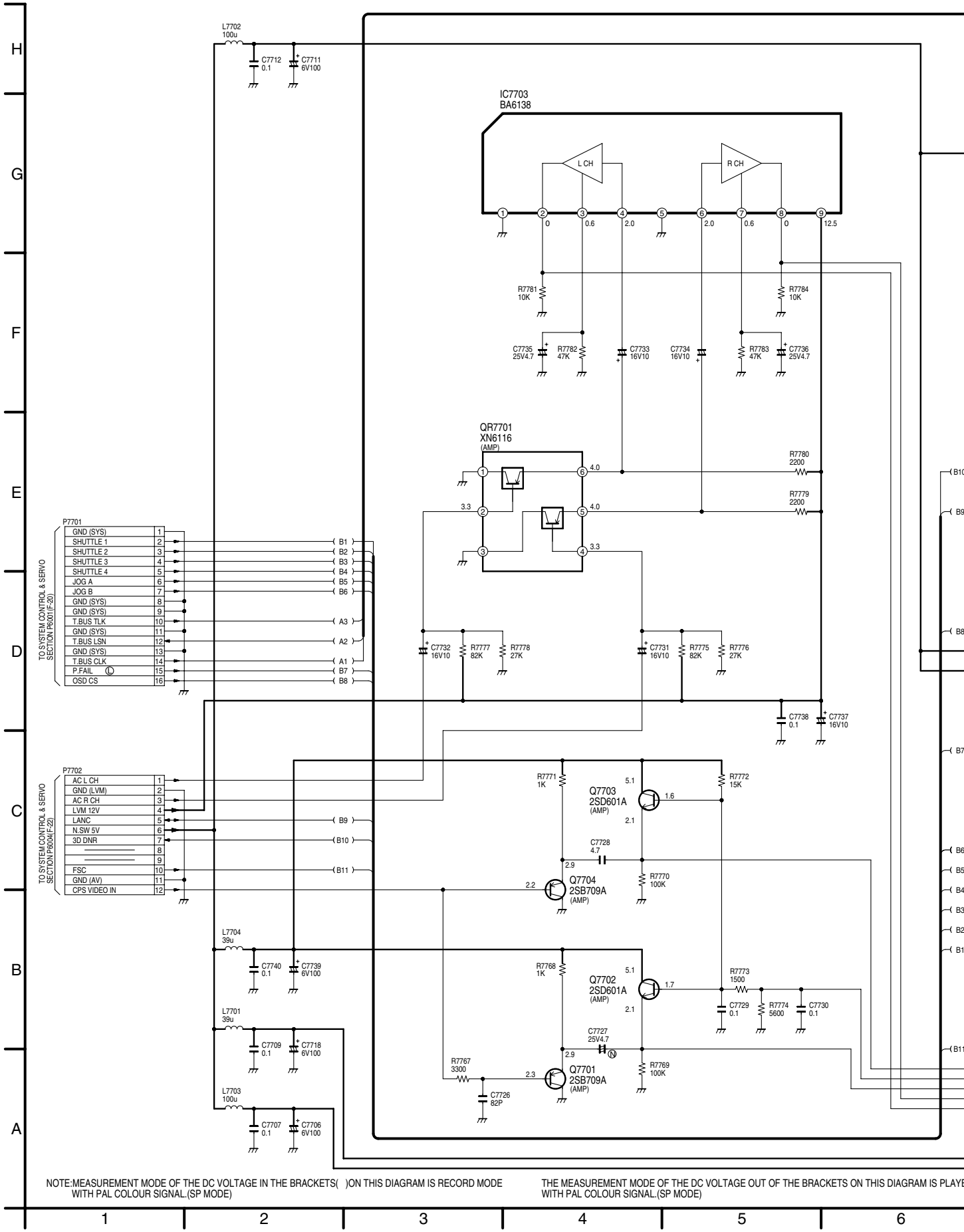
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE

Hi-Fi AUDIO SECTION SCHEMATIC DIAGRAM

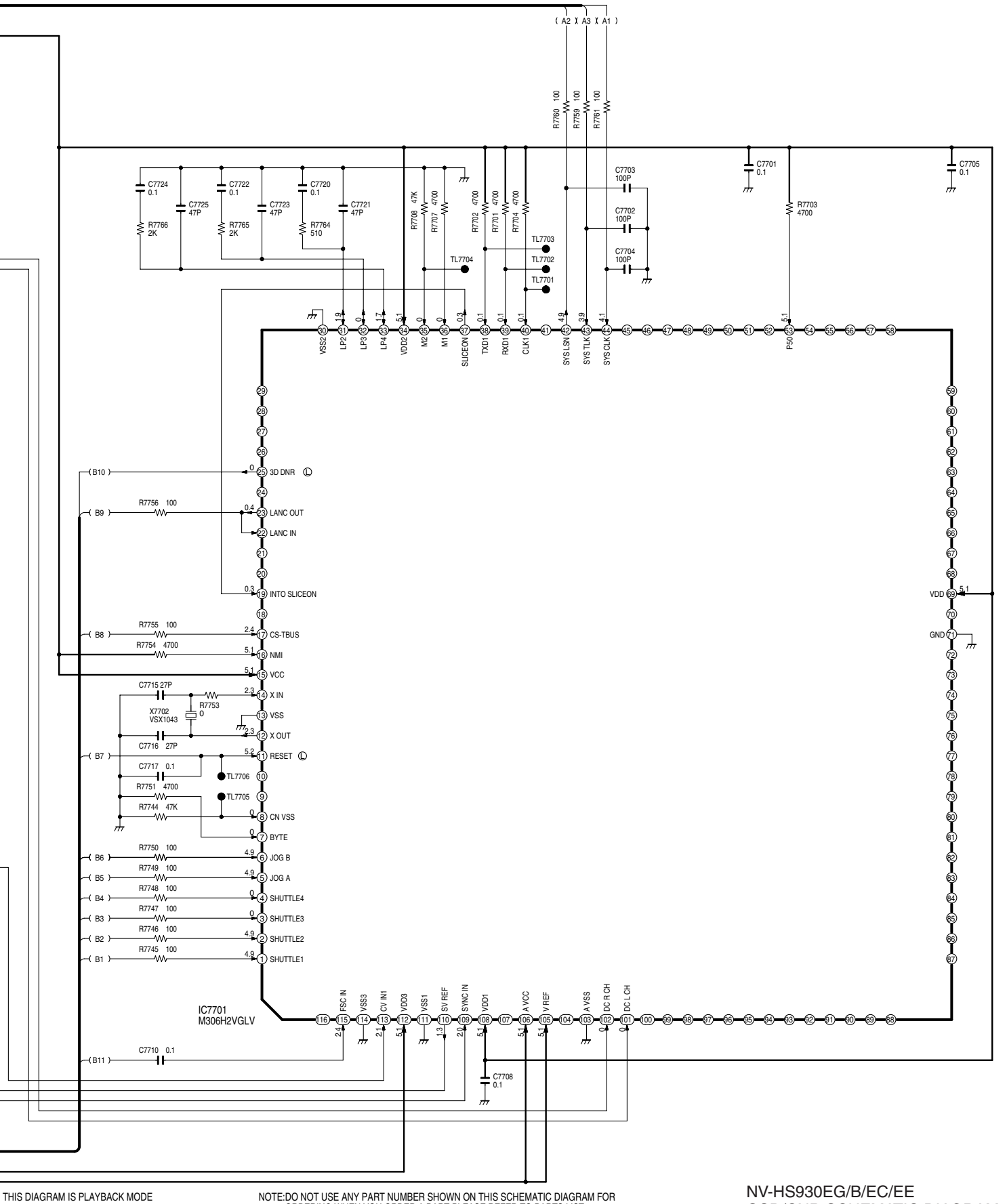
6 | 7 | 8 | 9 | 10 | 11

8.7. OSD/CNR SCHEMATIC DIAGRAM



NOTE:MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYE WITH PAL COLOUR SIGNAL.(SP MODE)



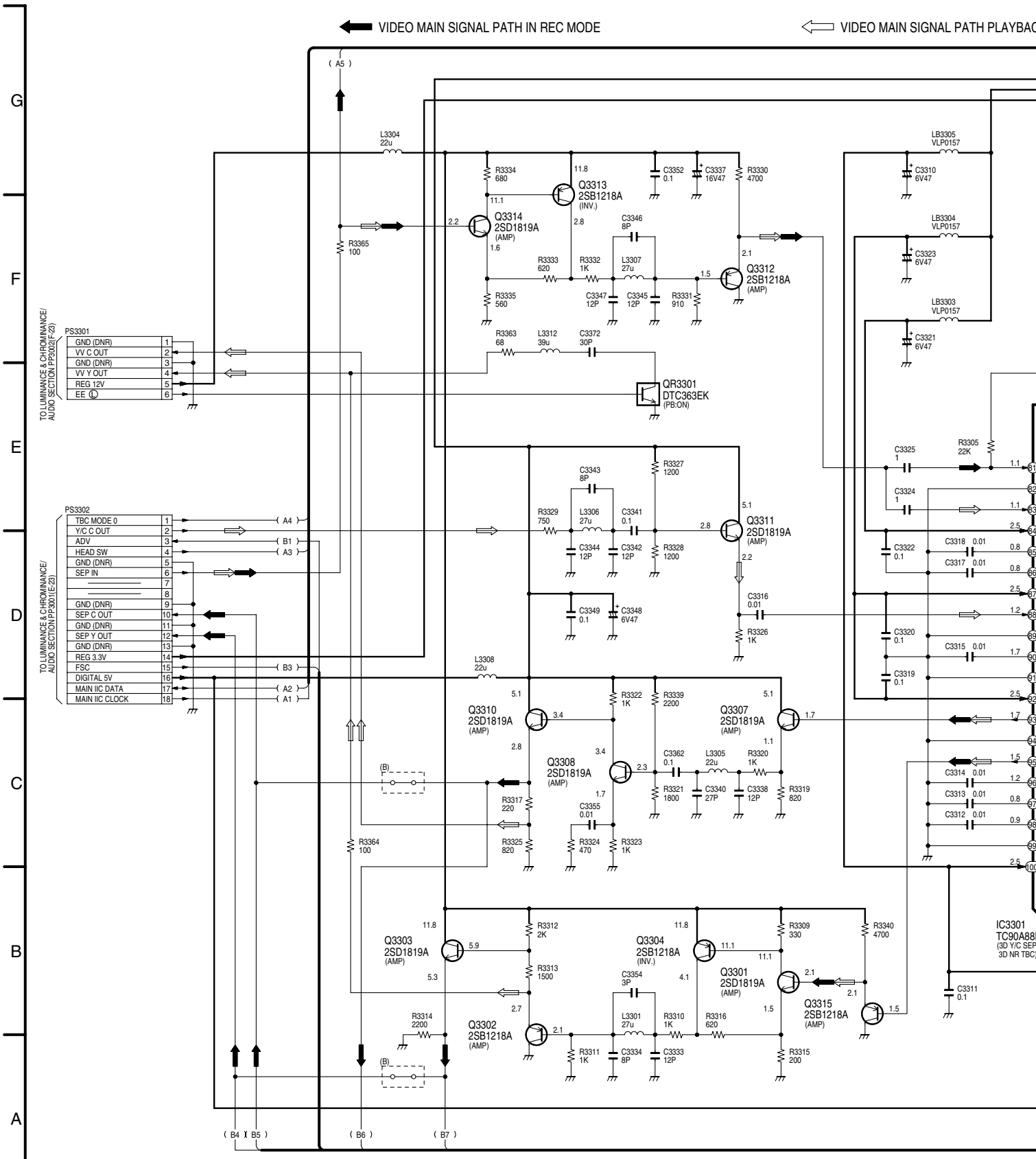
THIS DIAGRAM IS PLAYBACK MODE

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

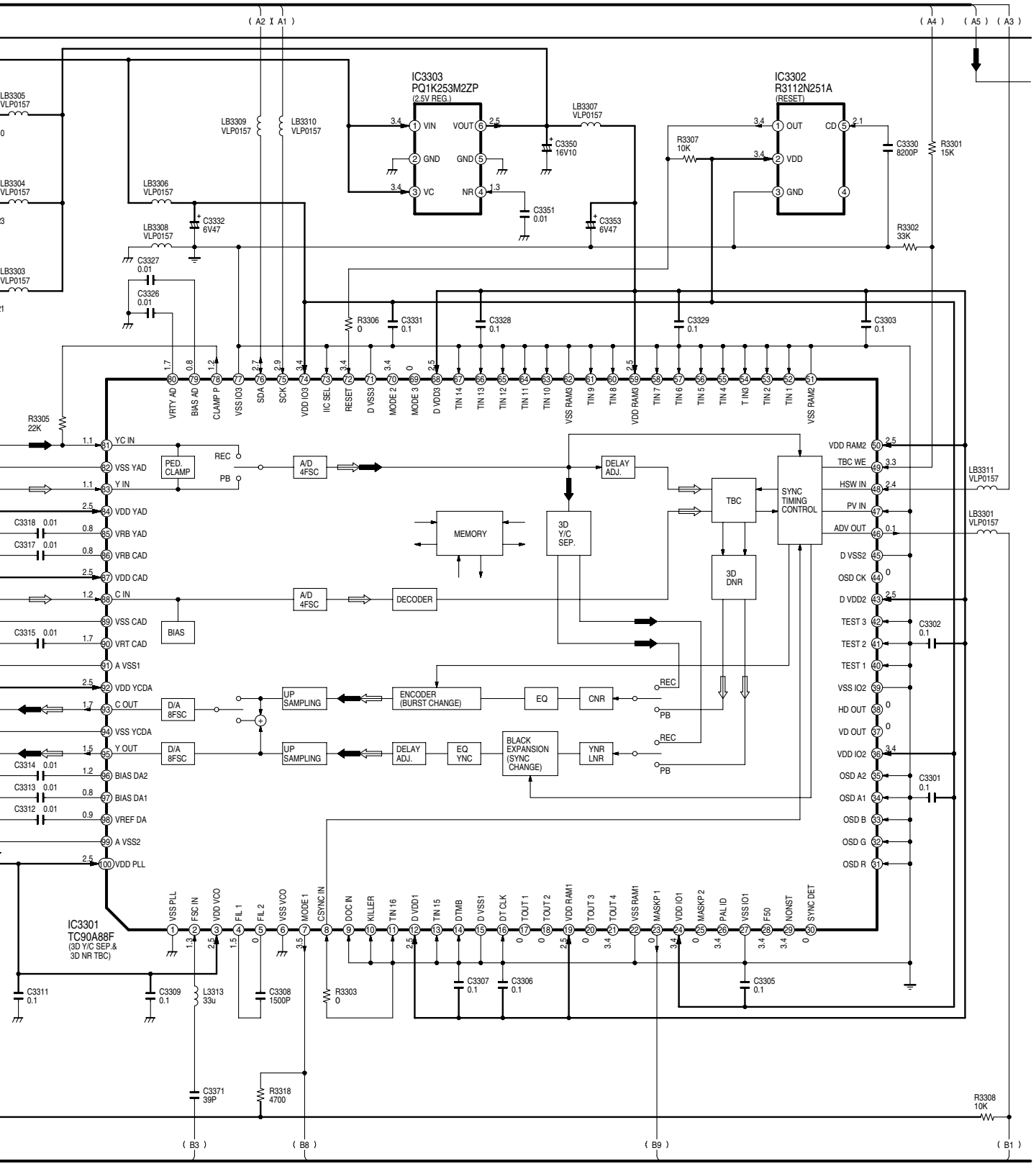
NV-HS930EG/B/EC/EE
OSD/CNR SCHEMATIC DIAGRAM

6 | 7 | 8 | 9 | 10 | 11 | 12

8.8. TBC/CNR PACK SCHEMATIC DIAGRAM


VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH PLAYBAC
TO LUMINANCE & CHROMINANCE/ AUDIO SECTION (PP3002(F-23)
PS3301
GND (DNR) 1
VV C OUT 2
GND (DNR) 3
VV Y OUT 4
REG 12V 5
EE 6
TO LUMINANCE & CHROMINANCE/ AUDIO SECTION (PP3001(E-23)
PS3302
TBC MODE 0 1
Y/C C OUT 2
ADV 3
HEAD SW 4
GND (DNR) 5
SEP IN 6
GND (DNR) 9
SEP C OUT 10
GND (DNR) 11
SEP Y OUT 12
GND (DNR) 13
REG 3.3V 14
FSC 15
DIGITAL 5V 16
MAIN IIC DATA 17
MAIN IIC CLOCK 18
Q3313 2SB1218A (INV.)
Q3314 2SD1819A (AMP)
Q3312 2SB1218A (AMP)
QR3301 DTC363EK (PB:ON)
Q3311 2SD1819A (AMP)
Q3310 2SD1819A (AMP)
Q3307 2SD1819A (AMP)
Q3308 2SD1819A (AMP)
Q3303 2SD1819A (AMP)
Q3304 2SB1218A (INV.)
Q3301 2SD1819A (AMP)
Q3315 2SB1218A (AMP)
Q3302 2SB1218A (AMP)
IC3301
TC90A88
(3D Y/C SEP
3D NR TBC)
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS WITH PAL COLOUR SIGNAL.(SP MODE)

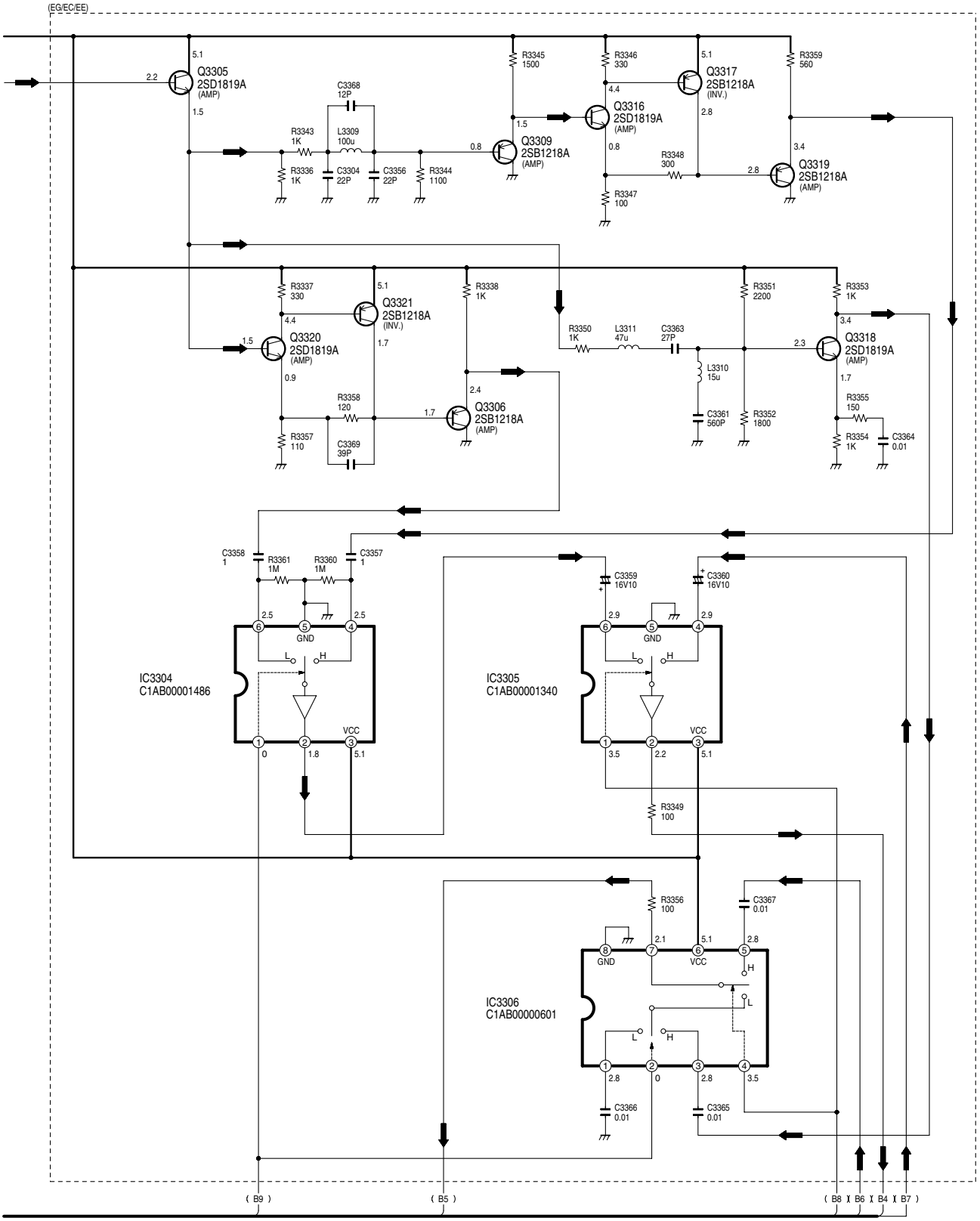
NAL PATH PLAYBACK MODE



TS ON THIS DIAGRAM IS PLAYBACK MODE

NV-HS930EG/B/EC/EE
TBC/DNR PACK SCHEMATIC DIAGRAM

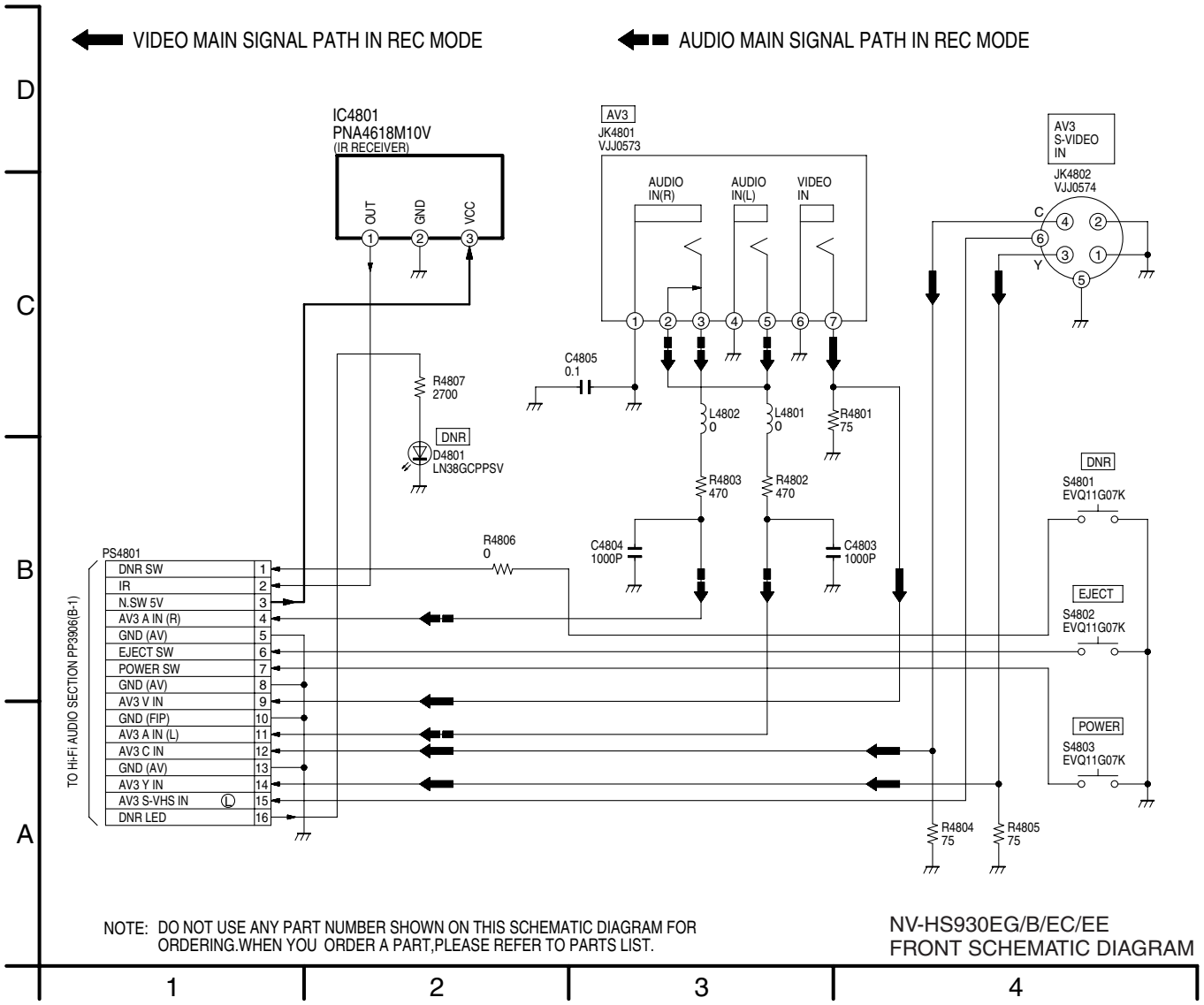
6 | 7 | 8 | 9 | 10 | 11



NV-HS930EG/B/EC/EE
TBC/DNR PACK SCHEMATIC DIAGRAM

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

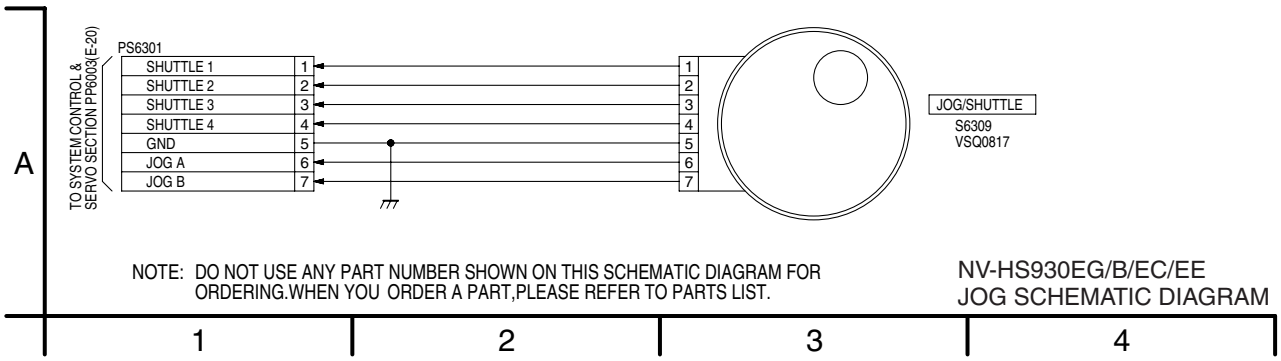
8.9. FRONT SCHEMATIC DIAGRAM



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
FRONT SCHEMATIC DIAGRAM

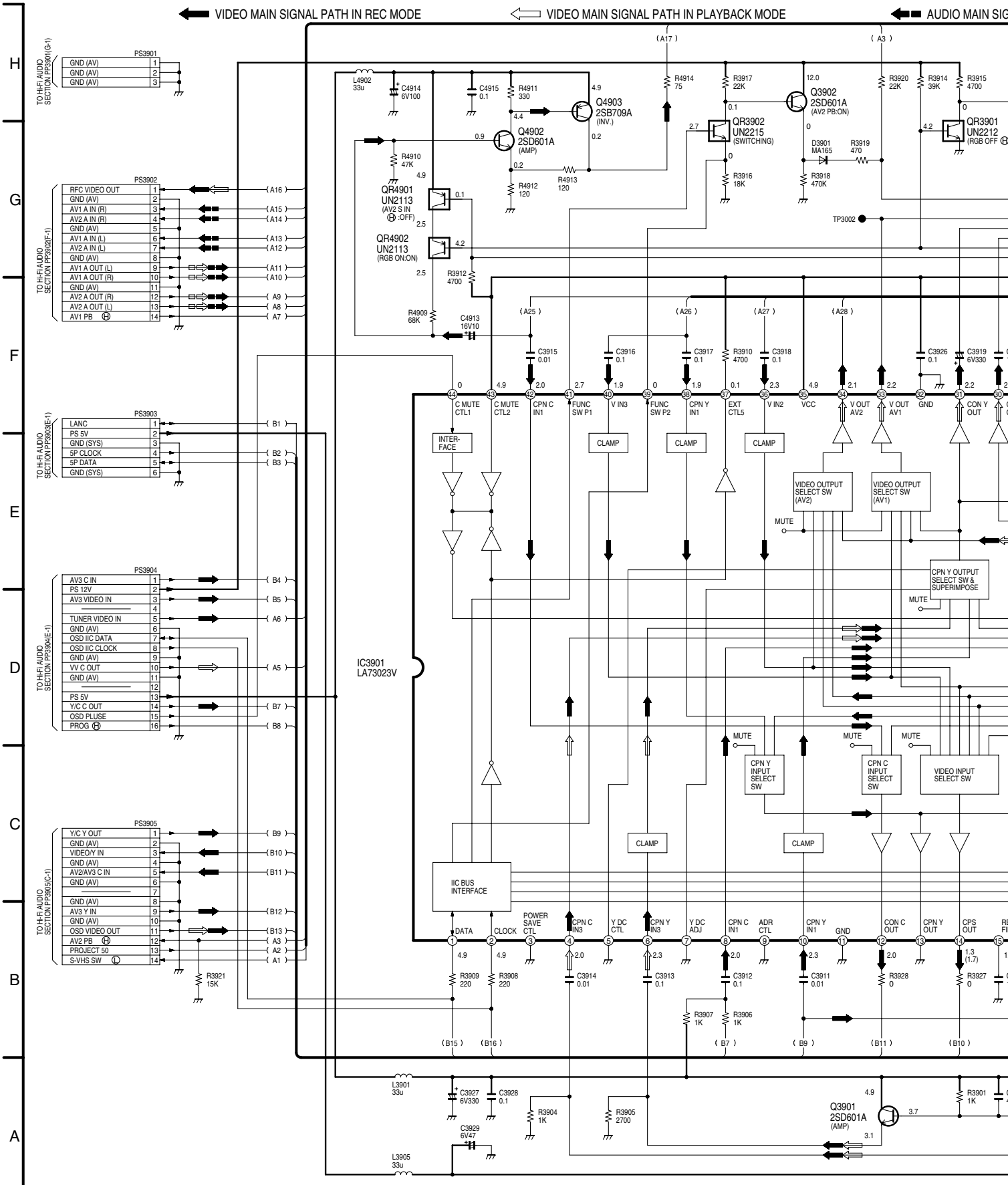
8.10. JOG SCHEMATIC DIAGRAM



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

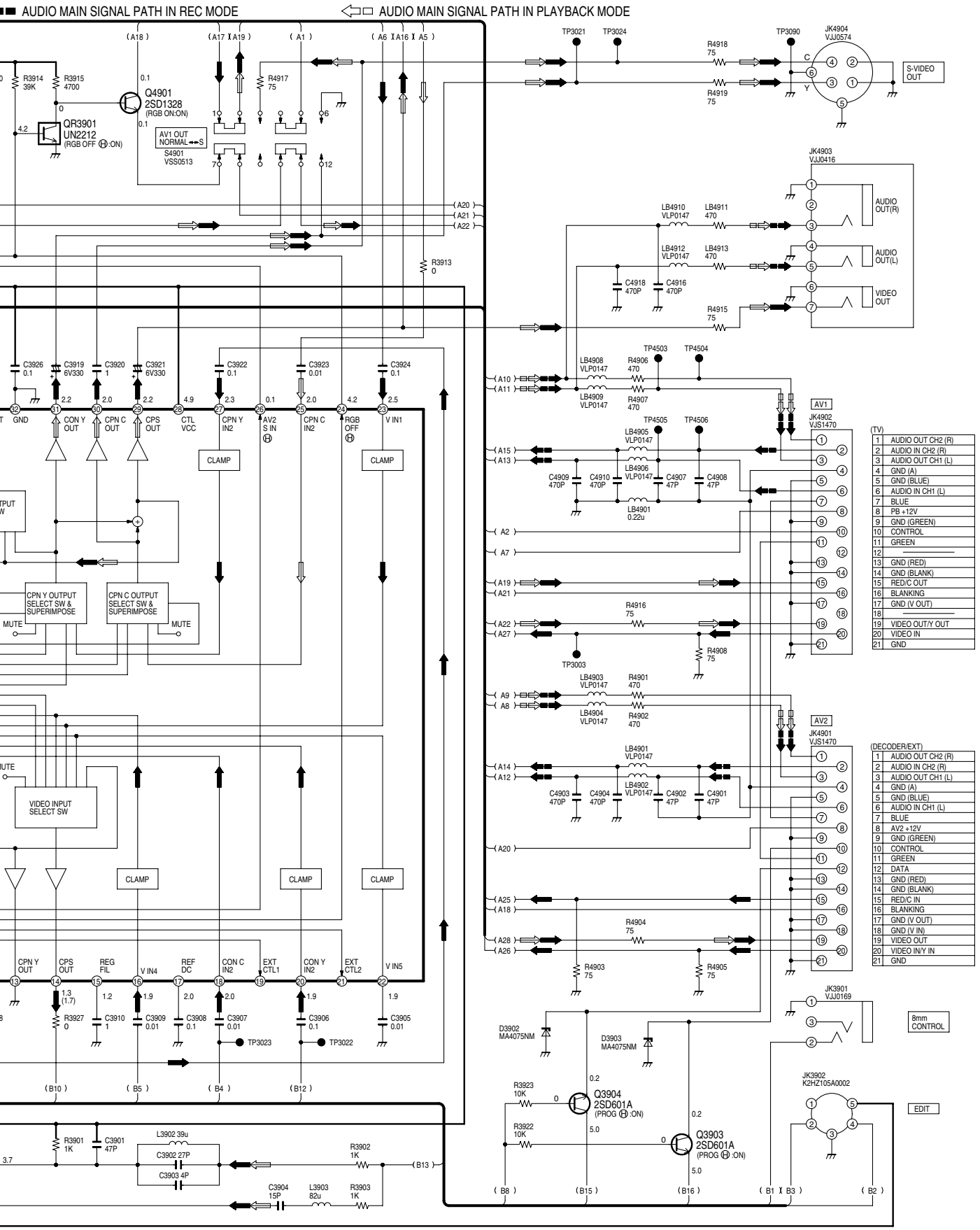
NV-HS930EG/B/EC/EE
JOG SCHEMATIC DIAGRAM

8.11. INPUT/ OUTPUT PACK SCHEMATIC DIAGRAM



NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.(SP MODE)



1	AUDIO OUT CH2 (R)
2	AUDIO IN CH2 (R)
3	AUDIO OUT CH1 (L)
4	GND (A)
5	GND (BLUE)
6	AUDIO IN CH1 (L)
7	BLUE
8	PB +12V
9	GND (GREEN)
10	CONTROL
11	GREEN
12	———
13	GND (RED)
14	GND (BLANK)
15	RED/C OUT
16	BLANKING
17	GND (V OUT)
18	———
19	VIDEO OUT/Y OUT
20	VIDEO IN
21	GND

1	AUDIO OUT CH2 (R)
2	AUDIO IN CH2 (R)
3	AUDIO OUT CH1 (L)
4	GND (A)
5	GND (BLUE)
6	AUDIO IN CH1 (L)
7	BLUE
8	AV2 +12V
9	GND (GREEN)
10	CONTROL
11	GREEN
12	DATA
13	GND (RED)
14	GND (BLANK)
15	RED/C IN
16	BLANKING
17	GND (V OUT)
18	GND (V IN)
19	VIDEO OUT
20	VIDEO IN/Y IN
21	GND

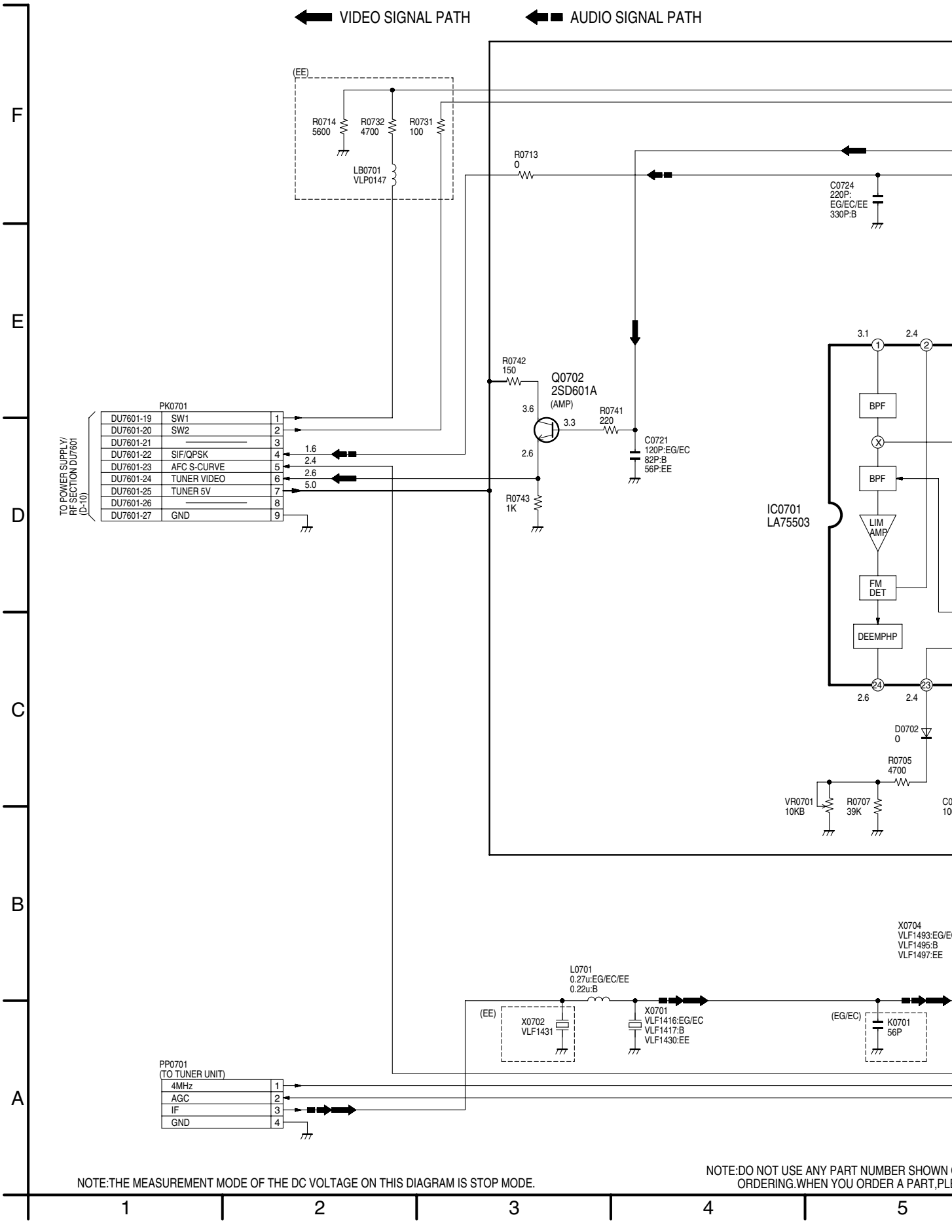
AM IS PLAYBACK MODE

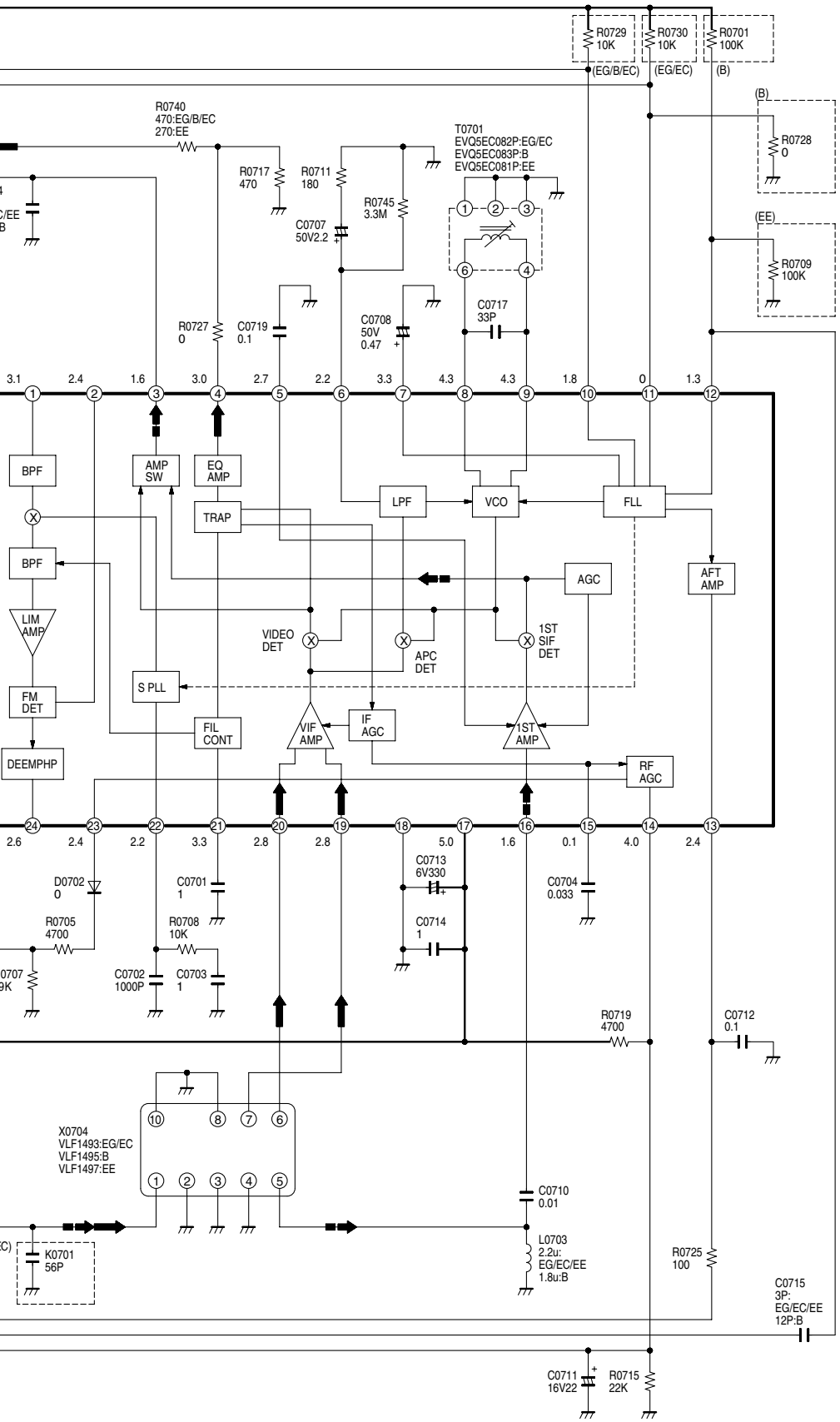
NOTE:DO NOT ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
INPUT/OUTPUT PACK SCHEMATIC DIAGRAM

7 | 8 | 9 | 10 | 11 | 12

8.12. TV DEMODULATOR PACK SCHEMATIC DIAGRAM



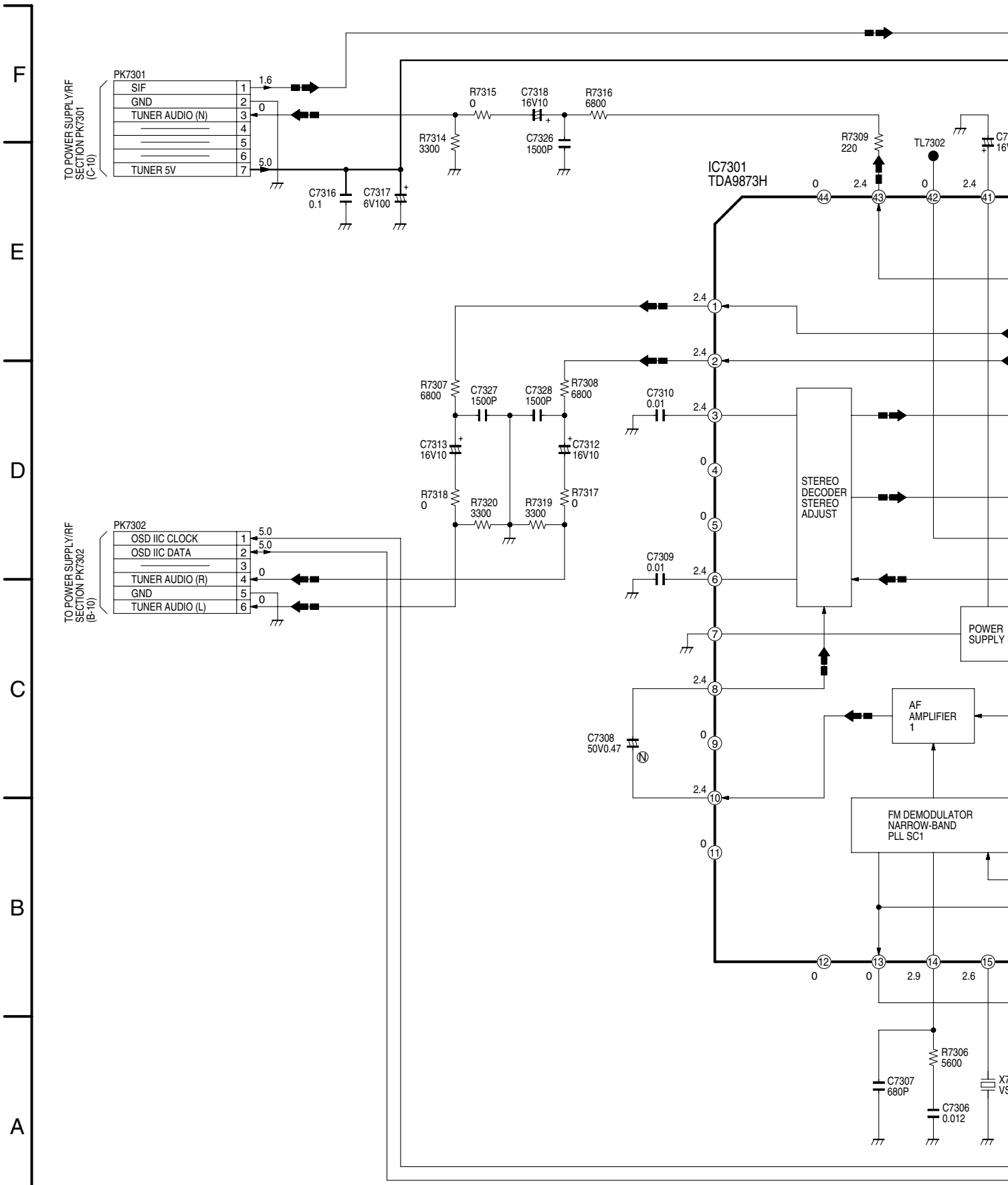


T NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR
ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-HS930EG/B/EC/EE
TV DEMODULATOR PACK SCHEMATIC DIAGRAM

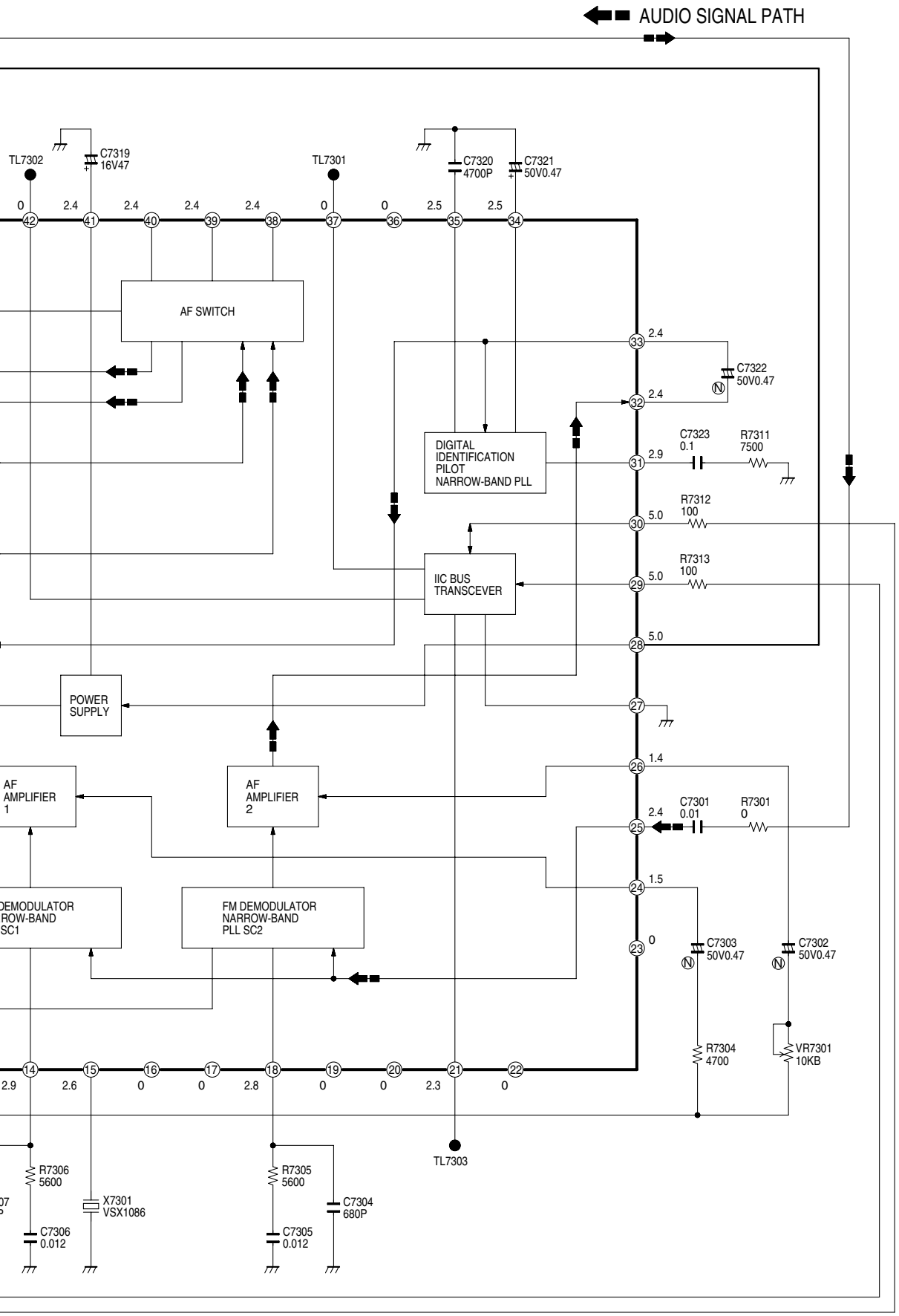
5 | 6 | 7 | 8

8.13. DECODER PACK SCHEMATIC DIAGRAM (NV-HS930EG)



NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART
ORDERING. WHEN YO

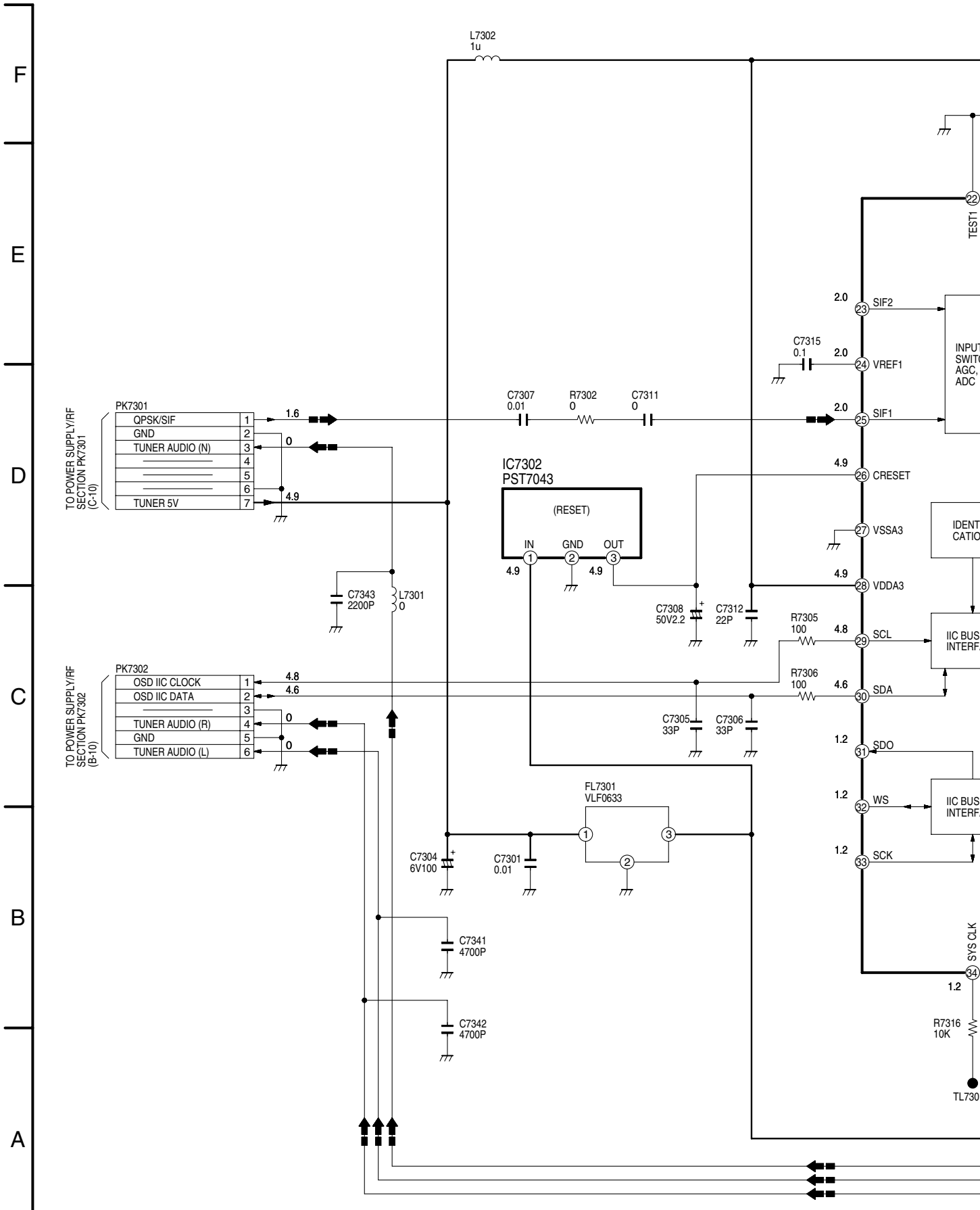


OT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR
ERING. WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

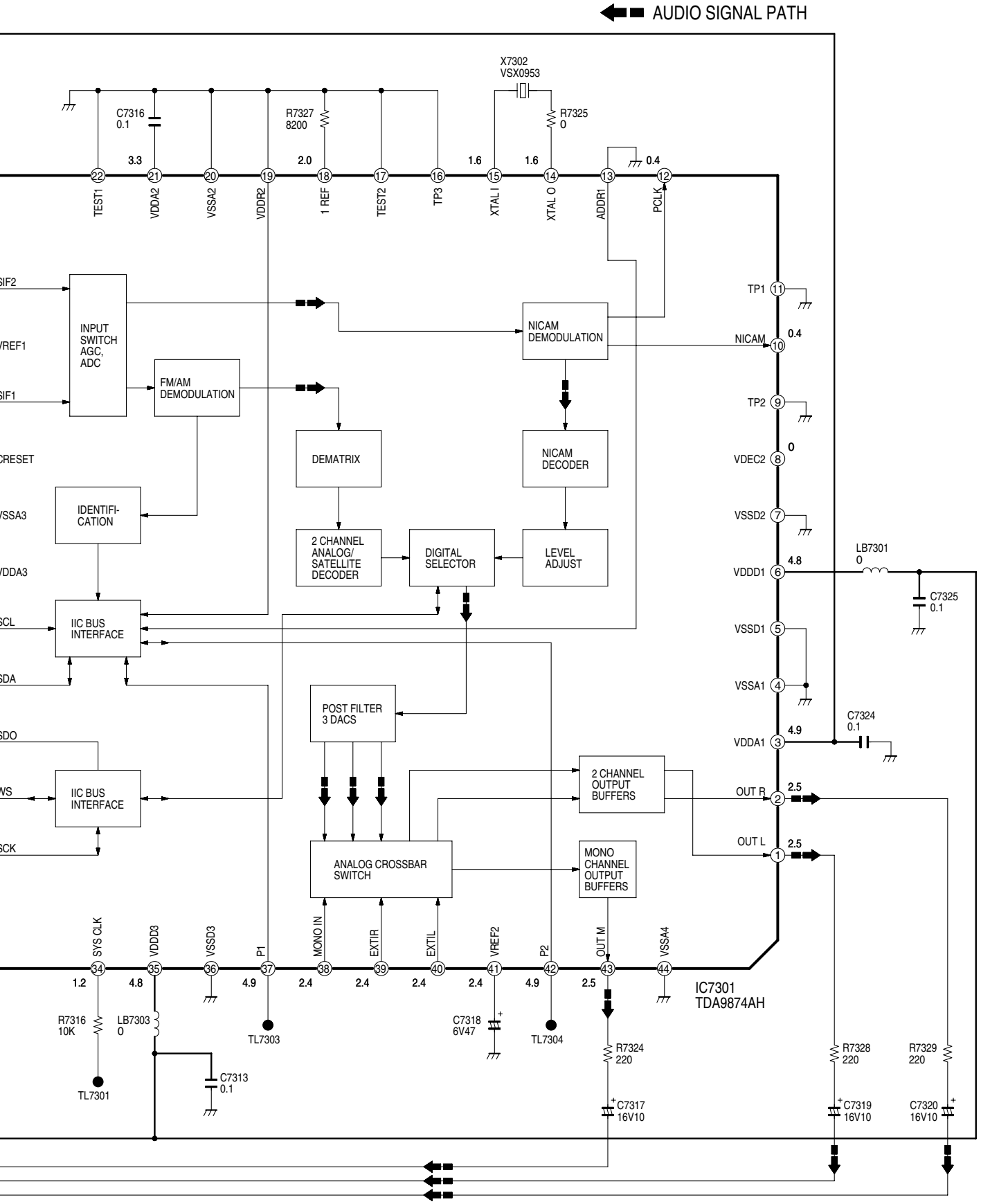
NV-HS930EG
DECODER PACK SCHEMATIC DIAGRAM

5	6	7	8

8.14. NICAM DECODER PACK SCHEMATIC DIAGRAM (NV-HS930B/EC/EE)



E)

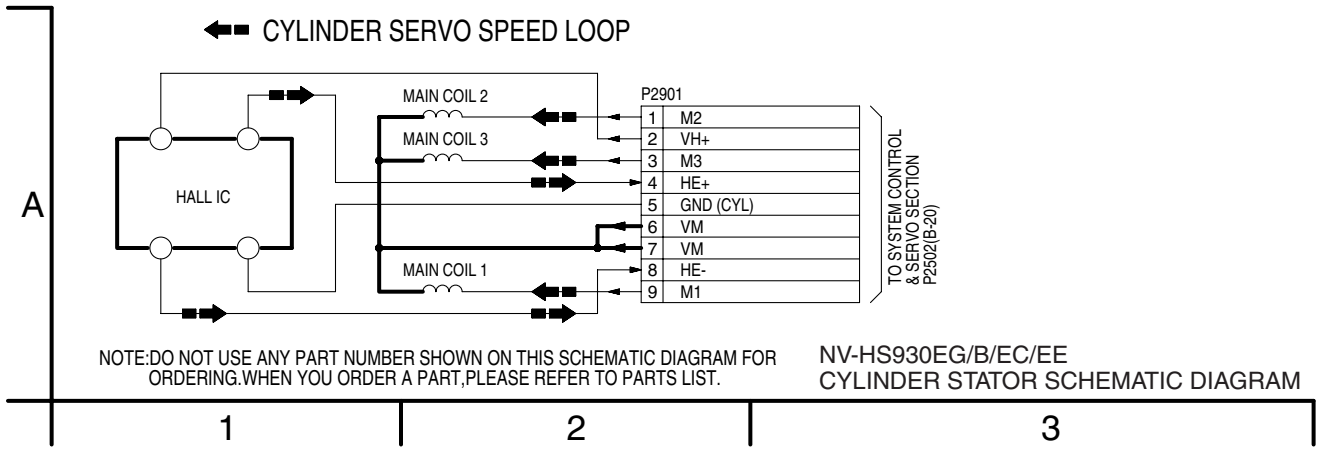


: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

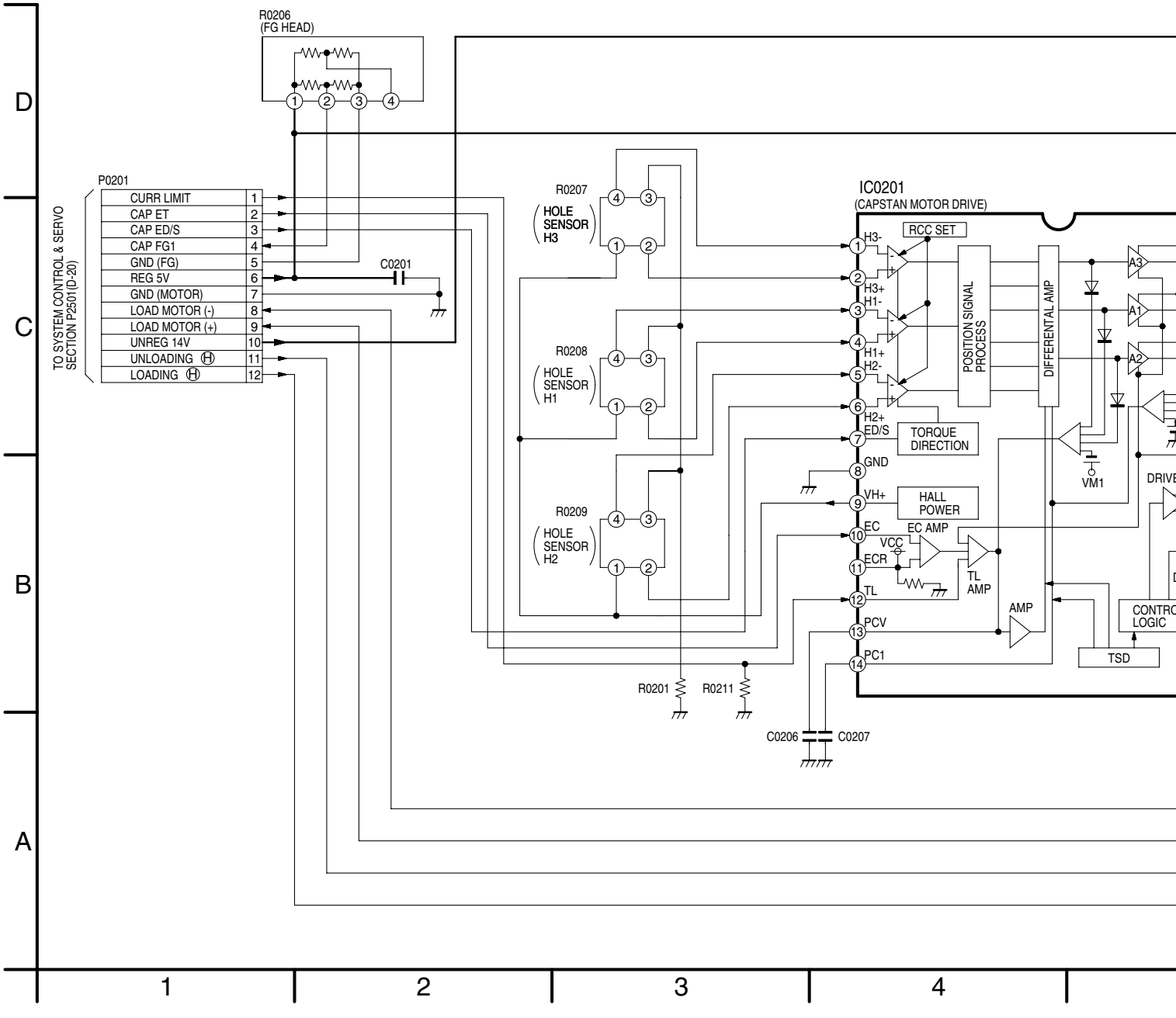
NV-HS930B/EC/EE
NICAM DECODER PACK SCHEMATIC DIAGRAM

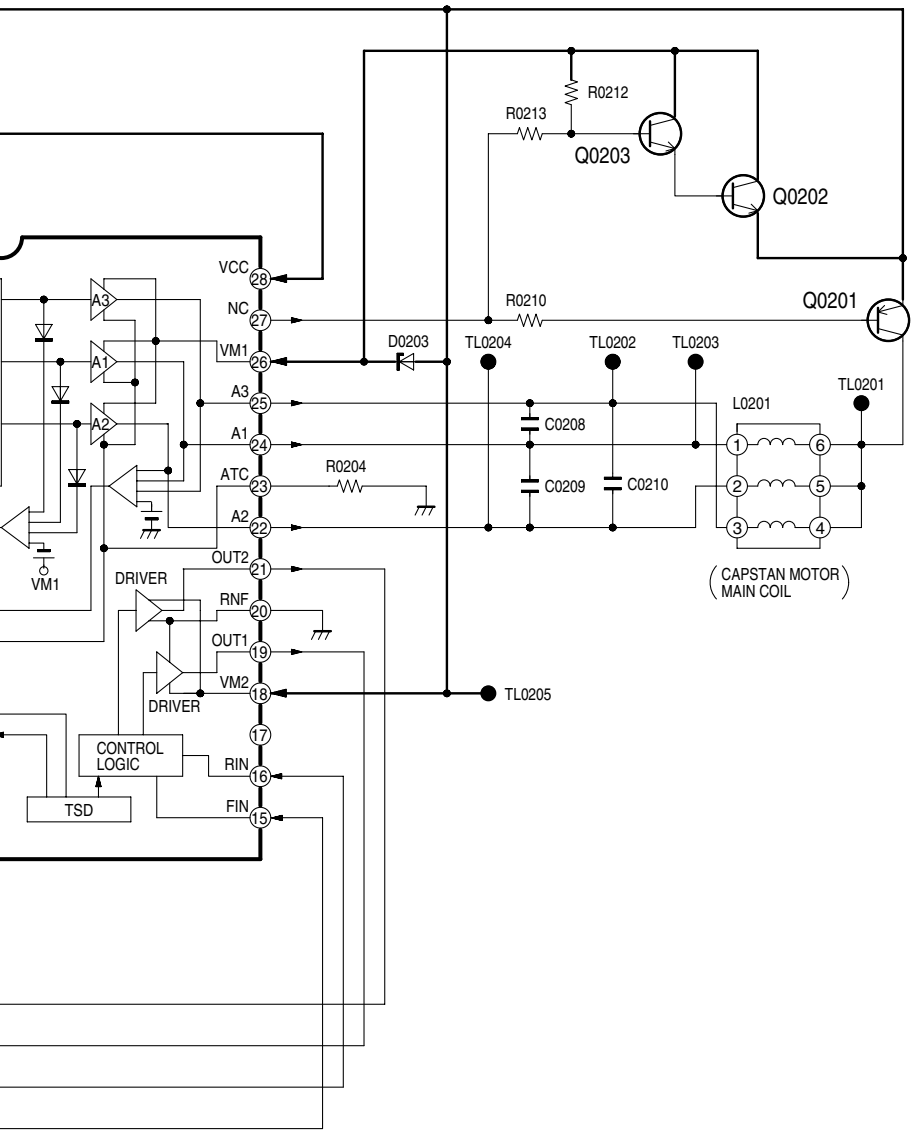
5 6 7 8

8.15. CYLINDER STATOR UNIT SCHEMATIC DIAGRAM



8.16. CAPSTAN UNIT SCHEMATIC DIAGRAM





NV-HS930EG/B/EC/EE
CAPSTAN UNIT SCHEMATIC DIAGRAM

5 6 7